

GENERAL SUMMARY

INTRODUCTION

The Census of Manufactures dates back to 1810, when, on the recommendation of the Secretary of the Treasury, Congress amended the census act to authorize a canvass of manufactures and to provide funds for it. The United States became thereby the first Nation to establish a census of industry. (See "Legal provision for biennial census," p. 1.) The census of 1810, taken by United States marshals without the use of formal schedules, covered imperfectly the industrial activities of the country at that time. The chief value of the statistics lies in the analysis of them by Tench Coxe, who was appointed by the Secretary of the Treasury to tabulate and interpret the returns.

The annual report of the Treasury Department for 1855 gives manufactures statistics or estimates for the four decennial census years from 1810 to 1840. According to this report, the value of products for 1810, based upon the incomplete census returns, Coxe's estimates, and Treasury revisions, was \$145,000,000.

Although the census of 1820 was so imperfectly taken that Congress refused to authorize the publication of the figures, the Treasury Department, in the document referred to above, reported \$53,000,000 as the value of products for that year, unquestionably a gross understatement of the actual value of industrial production.

The Census of Manufactures was omitted entirely in 1830, but on the basis of returns made from 10 States in compliance with a congressional resolution of 1832, the Treasury estimated the value of products for 1830 at \$113,000,000.

The report of the census of 1840, the most accurate and comprehensive canvass of industry up to that time, gave \$483,000,000 as the value of manufactured products. Although in prior years there had been a beginning of production by the factory method, particularly of textiles and iron, it was not until about this time that the factory method began to be extended rapidly to other products which entered into competition in the market with handmade goods.

Until about the middle of the nineteenth century, however, the bulk of general manufacturing was done in the neighborhood shop and in the household rather than in the factory. The census for 1849 is, therefore, the starting point for properly comparable statistics of manufactures, although not until the census for 1899 was there any satisfactory line of demarcation between the shop or household and the factory. Comparative statistics for the censuses for 1849 and subsequent years are given in Table 1, page

15. (See also "Comparableness with preceding years—Years covered," p. 2.)

The impetus given by the factory system to the improvement of mechanical equipment is indicated by the increase in the number of patents issued, from an average of 350 per annum during the period 1801-1850 to a yearly average of more than 5,000 for the period 1851-1870.

Not until the decade 1859-1869 did it become apparent that the complete supply of most staple commodities for the home market was within the capacity of domestic production. Manufacturing began about this time to be carried on in larger plants, and as a result the census for 1870 showed considerable increases both in wage earners and in value of output, but recorded a gain of less than 1 per cent in the number of industrial establishments.

By the close of the decade 1879-1889 the value of manufactures exceeded that of agricultural products. By this time, the full effect of machine manufacture was beginning to be felt, and capital and markets were expanding rapidly. The decade from 1889 to 1899, while showing a smaller percentage of increase in value of products than any prior decade for which comparable statistics were available, was important as marking the entrance of the United States into international trade in manufactures and the development of the corporate form of organization.

During the years between 1899 and 1919, with an upward secular tendency of commodity prices and with population increasing by 39 per cent, the value of manufactured products increased 444 per cent and the index of factory output, as measured in quantities of products rather than in dollars, rose from 100 to 214. The number of wage earners employed in manufacturing establishments almost doubled during the 20-year period. If, however, this is broken down into 5-year periods corresponding to the intervals between quinquennial censuses of manufactures, decidedly uneven rates of increases are noted. These irregularities reflect both general trends in business activity and particular cyclical conditions prevailing during the five census years covered by the returns. The increase in physical volume of output is estimated to have been 22 per cent between 1899 and 1904, 30 per cent between 1904 and 1909, 6 per cent between 1909 and 1914, and 26 per cent between 1914 and 1919. Since the last 5-year period began in a year of industrial depression, continued during the World War, and ended in a year of great industrial activity, the increase in production was not so great as might have

been expected—not so great, in fact, as during the 1904-1909 period of peace.

Manufacturing activity in 1929 reached a new high mark. The value of products manufactured increased 12.3 per cent over the value reported to the census for the previous record year, 1927, while the index of physical volume of output, based on the production of 1899 as 100, rose from 214 in 1919 and 272 in 1927 to 295 in 1929.

The horsepower capacity of prime movers (engines, turbines, and water wheels) in 1929 was only 2.3 per cent more than in 1927, and was practically the same as in 1919, but the horsepower capacity of motors driven by purchased electric energy increased 19 per cent from 1927 to 1929 and 145.3 per cent during the 10-year period.¹

The electrification of manufacturing industries is accomplished also by the use of motors connected with generators which in turn are driven by prime movers in the same plants. The capacity of such motors increased 77.6 per cent between 1919 and 1929, and in the latter year totaled 12,376,376 horsepower.

The increasing tempo of industrial production culminating in the record activity of 1929 occurred without a corresponding gain in the number of wage earners employed. Mechanization of industry and more efficient utilization of labor led to a drop of 1.8 per cent in factory employment in 1929 as compared with the abnormal postwar year 1919, but the number employed in 1929 showed an increase of 5.9 per cent over 1927. The wage budget of 1929, however, exceeded that of 1919 by 11.1 per cent and that of 1927 by 7.1 per cent.

¹ The rapid addition to power equipment of motors on purchased energy should be regarded with caution in any comparison between census years of either manufacturing activity or extent of plant mechanization, since the installation of motors for driving machines individually or in groups results in a greater power-equipment capacity for a given amount of production than is customarily required when the machines are driven by prime movers in the plant. (See "Power equipment," p. 8.)

The increase of 16.1 per cent in the total population of the United States during the past decade (1920-1930) and the decrease of 1.8 per cent in factory wage earners employed in 1929 as compared with 1919 reflect an employment condition which can not be fully accounted for in the statistics of the census of manufactures. While certain expanding industries, notably those referred to in the following paragraph, absorbed wage earners between 1919 and 1929 at a more rapid rate than that by which the population increased, the largest increase in the number of employment opportunities occurred not in the manufactures group taken as a whole, but in the distribution, service, and construction groups of industries, not covered by the census of manufactures.

Among the outstanding wage-earner gains in manufacturing industries between 1919 and 1929 were those which occurred in the following lines of production: Electrical machinery, apparatus, and supplies (including the manufacture of radio equipment), 54.8 per cent; bakery products, 41.8 per cent; furniture, 37.9 per cent; petroleum refining, 36.9 per cent; chemicals (including the manufacture of rayon and allied products), 36.1 per cent; and motor vehicles and parts, 30.4 per cent.

Twenty-two of the 48 States showed gains in factory wage-earner employment during the decade 1919-1929, the highest rates of increase recorded being those for five Southern States: South Carolina, 36.9 per cent; Tennessee, 34.9 per cent; North Carolina, 33.1 per cent; Georgia, 27.6 per cent; and Texas, 25.1 per cent. The major part of the gains in these States is accounted for by increases in the manufacture of cotton goods, knit goods, lumber, and furniture in the Carolinas; of cotton goods, knit goods, rayon, and motor-vehicle bodies and parts in Tennessee; of cotton goods, knit goods, and turpentine and rosin in Georgia; and of petroleum, foundry and machine-shop products, bakery products, and cotton goods in Texas.

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TABLE 1.—COMBINED SUMMARY FOR ALL MANUFACTURING INDUSTRIES, FOR THE UNITED STATES: 1849 TO 1929

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products	Value added by manufacture ¹
FACTORIES AND HAND AND NEIGHBORHOOD INDUSTRIES						
1849 ²	128,025	957,059	\$236,755,404	\$555,123,882	\$1,010,106,010	\$403,982,734
1859 ²	140,433	1,311,246	378,878,908	1,031,605,092	1,885,801,076	854,256,584
Per cent of increase, 1849 to 1859	14.1	37.0	60.0	85.8	85.1	84.1
1869 ²	252,148	2,053,996	620,467,474	1,990,741,704	3,385,860,354	1,395,118,560
Per cent of increase, 1859 to 1869	79.6	50.6	63.8	93.0	79.5	63.8
1879 ²	253,852	2,732,505	947,953,705	3,308,823,549	5,309,570,191	1,072,755,642
Per cent of increase, 1869 to 1879	0.7	33.0	52.8	70.6	58.6	41.4
1889 ²	365,405	4,251,535	1,891,219,606	5,162,013,878	9,372,378,843	4,210,304,985
Per cent of increase, 1879 to 1889	40.0	55.6	99.5	52.0	74.5	113.4
1899 ²	512,191	5,306,143	2,320,038,168	7,343,627,875	13,000,140,159	5,656,521,284
Per cent of increase, 1889 to 1899	44.1	24.8	22.7	42.3	38.7	34.3
FACTORIES, EXCLUDING HAND AND NEIGHBORHOOD INDUSTRIES						
1899 ²	207,514	4,712,703	2,008,361,119	6,575,851,491	11,406,926,701	4,881,075,210
1904 ²	216,180	5,408,383	2,010,444,953	8,500,207,810	14,793,902,503	6,203,694,763
Per cent of increase, 1899 to 1904	4.2	16.0	30.0	29.3	29.7	30.3
1909 ²	208,401	6,015,046	3,427,037,884	12,142,790,878	20,672,051,870	8,520,200,992
Per cent of increase, 1904 to 1909	24.2	21.0	31.3	42.9	39.7	35.5
Per cent of increase, 1899 to 1909	20.4	40.4	70.6	84.7	81.2	76.5
1914 ²	272,518	7,023,685	4,007,718,740	14,358,935,014	24,216,514,573	9,857,570,559
Per cent of increase, 1909 to 1914	1.5	0.2	18.7	18.3	17.1	15.6
Per cent of increase, 1904 to 1914	20.1	28.4	55.8	68.9	63.7	56.6
1914 ³	177,110	6,896,190	2,406,718,740	14,278,333,104	23,987,860,617	9,709,527,423
1919 ³	214,383	9,000,059	2,10,401,786,809	37,232,702,390	62,041,795,316	24,800,002,926
Per cent of increase, 1914 to 1919	21.0	30.5	157.2	160.8	158.6	155.5
1921 ³	196,207	6,946,570	8,202,324,339	25,321,055,348	43,653,282,833	18,332,227,487
Per cent of decrease (-), 1919 to 1921	-8.5	-22.8	-21.6	-32.0	-29.6	-26.1
1923 ³	196,300	8,778,156	11,000,297,726	34,705,697,749	60,555,998,200	25,850,300,451
Per cent of increase, 1921 to 1923	(4)	26.4	34.2	37.1	38.7	41.0
1925 ³	187,300	8,884,261	10,729,908,927	35,935,647,704	62,713,713,730	20,778,066,026
Per cent of increase or decrease (-), 1923 to 1925	-4.5	-4.5	-2.5	8.5	8.6	3.6
1927 ³	191,806	8,340,755	10,848,802,532	35,133,136,889	62,718,847,289	27,585,210,400
Per cent of increase or decrease (-), 1925 to 1927	2.4	-0.4	1.1	-2.2	(4)	8.0
1929 ³	210,959	8,838,743	11,620,973,254	38,540,579,732	70,434,803,443	31,885,233,711
Per cent of increase, 1927 to 1929	10.0	5.9	7.1	(4)	12.3	(4)

¹ Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

² For all establishments having products valued at \$500 or more. See GENERAL EXPLANATIONS—Establishments Covered—Size.

³ For all establishments having products valued at \$5,000 or more. See GENERAL EXPLANATIONS—Establishments Covered—Size.

⁴ Less than one-tenth of 1 per cent.

⁵ The cost-of-materials items for 1927 and earlier years, which include data on the cost of mill or shop supplies, are not strictly comparable with that for 1929, which does not include such data, and therefore no per cent of increase is shown. See GENERAL EXPLANATIONS—Comparability with Preceding Years—Schedule Changes—Mill or Shop Supplies.

⁶ Because of a change in the cost-of-materials item (see footnote 5), the figure for 1927 is not comparable with that for 1929, and therefore no per cent of increase is given.

TABLE 2.—INDEXES AND RATIOS FOR POPULATION, WAGE EARNERS, PRODUCTION, AND POWER: 1899 TO 1929

[For explanation of methods used in computing the indexes in this table, see "Production as measured by physical volume," p. 8]

Census year	INDEXES					RATIOS	
	Popula-tion	Wage earners	Produc-tion (quan-tity)	Produc-tion per wage earner	Horse-power ¹	Horse-power per 100 wage earners ¹	Wage earners per 1,000 population
1899	100	100	100	100	100	211	63
1904	110	114	122	107	133	248	65
1909	121	137	159	116	186	287	71
1914	131	146	169	118	224	328	70
1919	140	101	214	112	294	326	86
1921	145	147	170	118	(2)	(1)	64
1923	149	186	261	140	332	377	79
1925	154	178	280	151	350	427	73
1927	153	177	272	154	390	465	71
1929	162	188	295	157	481	486	73

¹ Covers rated capacity of prime movers and of motors driven by purchased electric energy. For explanation of the inflation of data for capacity, see GENERAL EXPLANATIONS—Power Equipment, p. 8.

² No data.

³ Revised.

CENSUS OF MANUFACTURES: 1929

TABLE 3.—COMBINED GENERAL STATISTICS FOR ALL MANUFACTURING INDUSTRIES: 1899 TO 1929

[No data for establishments reporting products valued at \$500 or more but less than \$5,000 are included in this table for the census years from 1921 to 1929, inclusive. For the years from 1904 to 1919, inclusive, data for such establishments have been deducted from the following items: Number of establishments; wage earners; cost of materials, containers for products, fuel, and purchased electric energy; value of products; value added by manufacture. It is impossible, however, to assemble separate figures relating to establishments having products valued at less than \$5,000, for the remaining items, covering the years 1904 to 1919, or for any items for 1899. Each of the items for 1899, therefore, refers to all establishments reporting products valued at \$500 or more. This difference in the value-of-products limit, however, has little effect on the comparability of the several items for different census years, with the exception of that for number of establishments. (See GENERAL EXPLANATIONS—Establishments Covered—Size.) The figures for the automobile-repairing industry have been deducted from the statistics for 1919 and 1914, the only census years for which this industry was canvassed. Data for the "Coffee and spice, roasting and grinding" industry are included for all years except 1925, for which year no statistics for this industry, for the United States as a whole, were compiled; and data for the "Poultry killing, dressing, and packing, wholesale" industry are included for all years except 1927, for which year this industry was not canvassed.]

YEAR OR PERIOD	Number of establishments	PERSONS ENGAGED IN MANUFACTURING INDUSTRIES				HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT		
		Total	Proprietors and firm members	Salaried officers and employees ¹	Wage earners (average for the year)	Total	Prime movers	Motors run by purchased energy
1920	210,959	10,330,728	133,210	1,358,775	8,838,743	42,931,061	20,155,307	22,775,664
1927	191,888	9,783,438	132,681	1,301,002	8,849,755	38,825,681	19,688,371	19,132,810
1925	187,390	9,773,051	133,054	1,255,736	8,884,261	35,772,628	19,903,800	15,868,828
1923	195,306	10,105,328	148,421	1,269,351	8,778,150	33,094,228	10,738,565	13,365,663
1921	196,207	8,265,321	172,871	1,146,380	6,946,570	(*)	(*)	(*)
1919	214,383	10,088,849	250,571	1,438,210	9,000,059	28,327,669	20,043,170	9,284,499
1914	177,110	8,117,695	250,172	902,533	6,896,190	22,290,800	18,406,175	3,884,724
1909	175,142	7,536,148	278,265	790,267	6,472,616	18,551,737	16,802,706	1,749,031
1904	145,033	6,107,250	225,673	519,556	5,362,030	13,296,394	12,884,805	441,589
1899	*207,514	(*)	(*)	364,120	4,712,763	9,980,980	9,778,418	182,562
PER CENT OF INCREASE OR DECREASE (—)								
1927-1929 ⁴	10.0	5.6	0.4	4.4	5.9	10.6	2.3	19.0
1925-1927 ⁴	2.4	0.1	-0.3	8.6	-0.4	8.5	-1.1	20.6
1923-1925 ⁴	-4.5	-4.1	-10.4	-1.1	-4.5	8.1	0.9	18.7
1921-1923 ⁴	(*)	(*)	-14.1	(*)	26.4	-----	-----	-----
1919-1921 ⁴	-8.5	-22.7	-31.0	-20.3	-22.8	-----	-----	-----
1919-1929 ⁴	-1.6	(*)	-46.8	(*)	-1.8	40.4	0.6	145.3
1909-1919 ⁴	22.4	41.8	-8.3	82.0	89.0	58.1	19.3	430.8
1899-1909 ⁴	-----	-----	-----	117.0	37.3	86.2	71.8	858.0
PER CENT OF INCREASE OR DECREASE (—)								
YEAR OR PERIOD	SALARIES AND WAGES ⁵			COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY ^{6,7}			Value of products ^{8,9}	Value added by manufacture ⁸
	Total	Salaries ¹	Wages	Total ⁹	Materials and containers ⁹	Fuel and purchased energy		
1920	\$15,216,037,315	\$3,695,064,061	\$11,620,073,254	\$38,549,579,732	\$36,683,414,013	\$1,866,165,719	\$70,434,863,443	\$31,885,288,711
1927	14,078,327,180	3,220,524,618	10,848,802,532	35,183,186,869	33,235,799,366	1,897,337,523	62,718,347,280	27,588,210,400
1925	13,651,784,805	2,921,815,878	10,729,968,927	35,085,647,704	(*)	(*)	62,718,713,730	20,778,066,028
1923	13,815,703,737	2,806,400,011	11,009,297,728	34,705,697,749	(*)	(*)	60,555,998,200	25,850,300,461
1921	10,765,427,145	2,563,102,800	8,202,324,339	25,321,065,340	(*)	(*)	43,653,282,833	18,332,227,487
1919	13,342,655,244	2,880,868,375	10,461,788,809	37,232,702,390	35,594,463,485	1,638,238,905	62,041,795,316	24,809,092,926
1914	5,342,157,369	1,274,428,620	4,067,718,740	14,278,333,194	13,612,435,727	665,897,487	23,987,860,617	9,709,527,423
1909	4,365,612,851	938,574,667	3,427,037,884	12,064,573,039	11,494,505,215	570,067,524	20,440,588,023	8,385,014,984
1904	3,184,884,275	674,489,322	2,610,444,953	8,183,880,722	8,113,992,896	324,877,826	14,617,774,351	6,173,013,829
1899	2,389,132,440	380,771,321	2,008,361,119	6,676,861,491	6,368,711,944	207,139,547	11,406,925,701	4,881,076,210
PER CENT OF INCREASE OR DECREASE (—)								
1927-1929 ⁴	8.1	11.3	7.1	(*)	(*)	-1.6	12.3	(*)
1925-1927 ⁴	3.1	10.5	1.1	-2.2	-----	-----	3.0	-----
1923-1925 ⁴	-1.2	4.1	-2.5	3.5	-----	-----	3.6	-----
1921-1923 ⁴	28.3	9.5	34.2	37.1	-----	-----	38.7	41.0
1919-1921 ⁴	-19.3	-11.0	-21.6	-32.0	-----	-----	-29.6	-26.1
1919-1929 ⁴	14.0	24.8	11.1	(*)	-----	13.9	18.5	(*)
1909-1919 ⁴	205.6	206.9	205.3	208.0	200.7	187.4	203.4	195.9
1899-1909 ⁴	82.7	146.5	70.6	83.5	80.5	175.2	79.3	73.6

¹ Data for employees of central-administrative offices are included in the figures for 1921 and earlier years but not in those for 1923 and subsequent years. The numbers and salaries of such employees, as reported for 1920, 1925, and 1923, are as follows: For 1920, 208,363 employees, \$600,437,331; 1925, 84,646, \$225,512,798; 1923, 86,378, \$207,840,169. Corresponding data for 1921 and earlier years can not be segregated. No percentages are, therefore, given for the 1921-1923 and 1919-1929. No data in regard to central-administrative-office employees were collected for 1927.

² Not called for on schedule.

³ No comparable data available for proprietors and firm members.

⁴ Because of the omission of data for the "Coffee and spice, roasting and grinding" industry for 1925 and of data for the "Poultry killing, dressing, and packing, wholesale" industry for 1927 (see headnote), the percentages for 1923-1925 overstate slightly the true increases and overstate slightly the true decreases, and those for 1925-1927 and for 1927-1929 overstate slightly the true increases and underestimate slightly the true decreases.

⁵ Less than one-tenth of 1 per cent.

⁶ Manufacturers' profits can not be calculated from the census figures because no data are collected for certain expense items, such as interest on investment, rent, depreciation, taxes, insurance, and advertising.

⁷ The aggregates for cost of materials and value of products include large but indeterminable amounts of duplication due to the use of the products of some industries as materials by others.

⁸ Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture. The figures for 1927 and earlier years are not strictly comparable with those for 1929 because of a change in the cost-of-materials item, and therefore no percentages of increase are shown for 1927-1929 and 1919-1929. (See footnote 9.)

⁹ The cost-of-materials items for 1927 and earlier years, which include data on the cost of mill or shop supplies, are not strictly comparable with that for 1929, which does not include such data, and therefore no percentage of increase is shown. See GENERAL EXPLANATIONS—Comparability with Preceding Years—Schedule Changes—Mill or Shop Supplies.

¹⁰ Not reported separately.

¹¹ Not comparable with figures for later years. Includes number reporting products valued at less than \$5,000. See headnote.

TABLE 4.—GENERAL STATISTICS FOR ALL INDUSTRIES, BY GEOGRAPHIC DIVISIONS AND BY STATES: 1929, 1927, AND 1919

[Data for the "Automobile repairing" industry and data for establishments with products valued at \$500 or more but less than \$5,000, in all industries, are included in the geographic division and State items for 1919 but not in the United States totals. No data for either of these classes of establishments are included in any of the figures for 1927 or 1929]

DIVISION AND STATE		PERSONS ENGAGED IN MANUFACTURING INDUSTRIES ¹										COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY										Value added by manufac-ture ²												
		Horse-power					Salaries ¹					Wages					Total					Materials and containers												
		Propri- e- tors and firm mem- bers ¹	Salaried officers and employees ¹	Waee workers (average for the year)	Total ¹	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24					
UNITED STATES		210,950	10,330,728	133,210	42,931,061	\$3,838,743	42,935,631	33,825,631	3,349,755	1,301,002	\$11,620,973	254	\$36,549,579	732	\$36,653,414	013	\$1,866,165	719	\$70,434,863	443	\$31,885,253	711	527,118	317	585,210	100	527,118	317	585,210	100				
1927		191,566	8,782,328	152,681	42,931,061	33,825,631	3,349,755	1,301,002	2,880,365	375	10,461,786	869	351,153	136,589	351,226	706,366	1,638,238	905	35,694,403	456	62,041	785,316	24,809,002	126	62,041	785,316	24,809,002	126						
1919		214,353	10,983,849	1,485,219	9,000,059	23,327,689	3,349,755	1,301,002	2,880,365	375	10,461,786	869	351,226	706,366	351,226	706,366	1,638,238	905	35,694,403	456	62,041	785,316	24,809,002	126	62,041	785,316	24,809,002	126						
GEOGRAPHIC DIVISIONS:																																		
New England		18,272	1,256,504	10,636	147,354	1,098,514	4,686,822	386,368	899	1,346,391	525	3,188,416	191	3,014,417	376	143,988	815	6,398,214	685	3,239,748	494	2,979	611	869	3,239,748	494	2,979	611	869	3,239,748	494			
1927		17,745	1,535,055	21,470	182,196	1,351,339	3,779,818	334,295	008	1,426,456	537	3,951,903	150	3,382,605	017	150,605	930	140,266	888	7,183	749	2,435,976	079	9,044	245	832	2,435,976	079	9,044	245	832	2,435,976	079	
1919		21,528	3,450,563	86,266	411,674	2,872,653	8,512,612	1,019,385	355	3,464,931	257	11,424	095	826	10,843,787	208	550,308	618	19,364,772	760	8,430,676	324				8,430,676	324	8,430,676	324	8,430,676	324			
Middle Atlantic		64,750	3,047,316	44,473	40,503	2,662,340	11,623,632	1,212,612	561	3,640,416	539	11,188,618	620	10,488,531	747	9,576,334	130	612,497	617	19,583,075	797	10,175	955	933	10,175	955	933	10,175	955	933	10,175	955	933	
1927		62,276	3,450,563	86,266	411,674	2,872,653	8,512,612	1,019,385	355	3,464,931	257	11,424	095	826	10,843,787	208	550,308	618	19,364,772	760	8,430,676	324				8,430,676	324	8,430,676	324	8,430,676	324			
1919		45,671	2,884,536	49,586	488,632	2,396,618	7,702,551	870,019	894	3,246,580	715	10,525,302	203	9,588,100	045	649,580	125	637,283	188	21,663,460	323	8,435,007	225	9,479,594	323	8,435,007	225	9,479,594	323					
East North Central		1929	577,214	10,054	93,045	474,115	2,210,192	215,510	466	1,083,074	074	1,083,074	074	3,507,922	311	3,413,044	209	94,348,102	102	5,377,382	984	1,889,900	673				1,889,900	673	1,889,900	673	1,889,900	673		
1927		16,182	639,323	26,859	112,829	499,356	1,582,309	196,496	352	546,172	557	3,778,125	226	3,689,936	604	98,822	018	4,733,111	429	5,187	064	766	1,495,935	340	1,495,935	340	1,495,935	340						
1919		20,860	1,014,505	14,510	87,748	912,247	4,318,015	208,768	172	825,902	832	2,811,055	098	2,670,535	550	140,460	548	5,269,276	425	2,458,221	327	5,269,276	425	2,458,221	327	5,269,276	425							
South Atlantic		1929	17,039	931,595	20,883	84,500	879,000	3,805,058	817	2,714,815	733	794,204	670	2,437,570	882	2,316,656	241	141,214	641	4,631,887	004	4,465,151	691	4,465,151	691	4,465,151	691	4,465,151	691					
1927		9,880	423,580	6,975	39,035	477,870	1,988,354	91,787	353	348,732	174	1,090,015	001	1,014,450	541	75,553	460	2,014,443	158	924,424	428	1,252	122	924,424	428	1,252	122	924,424	428					
1919		14,635	339,950	15,620	277,749	329,226	1,414,190	71,439	834	288,710	318	1,025,122	182	952,675	099	72,447	083	1,808,818	018	1,642	381	461	664	566	944	1,642	381	461	664	566	944			
West South Central		1929	10,576	347,425	6,356	43,336	297,743	1,749,555	100,267	324	316,424	819	1,851,629	694	1,798,150	397	53,479	297	5,289,401	437	75,255	329	729,867	777				729,867	777				729,867	777
1927		8,208	13,437	41,269	285,244	1,179,896	75,740	469	285,244	1,179,896	75,740	293,021	663	1,547,938	571	1,500,847	049	47,146	562	2,277,861	293	729,867	777				729,867	777				729,867	777	
1919		13,909	339,950	13,437	41,269	285,244	1,179,896	75,740	469	285,244	1,179,896	75,740	293,021	663	1,547,938	571	1,500,847	049	47,146	562	2,277,861	293	729,867	777				729,867	777				729,867	777
Mountain		1929	4,319	121,185	2,407	16,286	102,492	928,688	36,915	676	316,424	819	144,455	836	889,855	516	41,986	224	1,239,910	858	370,056	342				370,056	342				370,056	342		
1927		3,919	133,447	6,829	17,402	109,265	94,957	130,363	790	629,256	685	141,900	942	130,363	790	610,786	649	610,816	500	981,080	390	321,490	390				321,490	390				321,490	390	
1919		7,612	18,154	563,473	12,939	94,288	471,246	2,882,301	230,365	318	670,559	107	2,357,798	555	559,999	365	2,052,310	814	64,345	286	4,310,680	504	1,922,881	949				1,922,881	949				1,922,881	949
Pacific		1929	19,187	515,342	19,187	60,976	435,179	1,752,686	119,793	206	581,299	395	1,161,384	300	1,814,338	225	1,815,242	090	53,885	885	3,157,610	312	1,289,368	222				1,289,368	222				1,289,368	222
NEW ENGLAND:		1929	1,568	77,690	891	6,640	70,159	679,185	16,100	485	74,199	961	217,366	820	204,622	589	12,744	231	391,751	334	174,384	514				174,384	514				174,384	514		
1927		2,955	99,312	2,745	1,341	7,916	55,651	17,502,855	94,254	346	254,365	523	254,365	523	241,064	361	12,453	662	372,053	474	163,227	705				163,227	705				163,227	705		
1919		2,436	1,075	71,941	703	5,722	65,511	402,147	14,732	103	70,153	919	183,402	323	176,427	427	8,488,806	427	8,807,248	322	322,534	733				322,534	733				322,534	733		
New Hampshire		1929	1,028	10,037	9,872	645,031	5,867	31,670	557,484	2,068,521	215,218	694,805	312	1,631,432	788	1,631,432	788	1,678,312	411	80,228	855	145,421	498				145,421	498				145,421	498	
1927		1,498	9,106	812,591	9,451	80,234	713,826	13,435,405	13,212	402	79,366	341	238,327	617	231,558	446	7,928,171	171	407,204	934	167,677	317				167,677	317				167,677	317		
1919		11,906	1,497	1,497	1,497	1,497	1,497	1,497	1,497	1,497	1,497	1,497	1,497	1,497	1,497	1,497	1,497	1,497	1,497	1,497	1,497	1,497	1,497	1,497	1,497	1,497	1,497	1,497	1,497	1,497				
Massachusetts		1929	1,563	289,579	1,563	38,155	251,861	909,239	98,480																									

TABLE 4.—GENERAL STATISTICS FOR ALL INDUSTRIES, BY GEOGRAPHIC DIVISIONS AND BY STATES: 1929, 1927, AND 1919—Continued
[See note at head of this table]

[See note at head of this table]

CENSUS OF MANUFACTURES: 1929

COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY										Value added by manufacture, 1	
PERSONS ENGAGED IN MANUFACTURING INDUSTRIES 1					Value of products					Value added by manufacture, 1	
DIVISION AND STATE		Census year	Number of establishments	Total 1	Horse-power		Salaries 1		Materials and containers	Fuel and purchased energy	Value added by manufacture, 1
Proprietors and firm members 1	Salaried officers and employees 1	Wage earners (average for the year)	Total 1	Proprietors and firm members 1	Salaried officers and employees 1	Wages	Salaries 1	Total 1	Materials and containers	Fuel and purchased energy	Value added by manufacture, 1
MIDDLE ATLANTIC:											\$4,973,920,158 4,505,858,652 3,223,790,987
New York		1929 38,395	1,359,731	28,374	225,381	1,105,966	3,886,781	644,503,633	\$4,810,222,972	\$9,078,556,143	\$4,973,920,158 4,505,858,652 3,223,790,987
1927 36,650	49,430	1,524,761	49,434	247,147	1,223,130	3,977,185	1,003,378,056	4,804,172,874	9,400,001,376	\$9,078,556,143	
1919 49,330						2,926,983	513,547,903	4,943,213,919	8,887,004,906		
NEW JERSEY:		1929 8,388	2,121,262	4,636	74,248	442,328	1,495,488	610,690,378	\$5,004,635,085	\$104,403,013	\$1,771,429,649
1927 8,312		11,057	622,170	2,885	84,125	408,093	1,495,935	570,308,502	4,866,947,097	3,417,450,248	1,450,855,151
1919 11,057						508,056	1,140,554	600,655,345	2,270,473,279	3,672,084,987	1,401,591,708
PENNSYLVANIA:		1929 16,947	1,166,322	11,413	140,864	1,014,046	5,991,483	1,370,444,293	\$4,013,255,531	\$3,650,107,606	\$3,430,605,526
1927 17,614		27,973	1,323,662	27,433	160,392	987,414	5,800,654	1,315,935,319	3,405,091,289	3,457,501,679	3,165,594,220
1919 27,973						4,455,095	334,763,215	1,406,056,138	3,805,108,628	3,805,108,628	3,165,594,220
LAST NORTH CENTRAL:											
Ohio:		1929 11,855	839,289	5,904	112,292	741,143	4,340,575	302,013,905	1,102,166,499	3,138,098,834	6,027,903,137
1927 10,961		16,125	832,918	12,823	139,382	668,097	374,761	944,651,734	2,911,947,350	5,200,984,303	3,345,107,023
1919 19,199						2,885,007	273,714,350	2,929,033,617	2,911,947,351	5,100,308,728	2,188,360,857
Indiana:		1929 5,091	302,455	2,505	45,190	314,698	1,655,755	115,415,151	1,403,431,157	1,280,194,322	1,126,462,692
1927 4,726		301,145	6,768	45,787	250,113	1,602,113	418,771,160	1,227,168,357	1,100,891,502	1,205,367,053	926,310,575
1919 7,916						356,116,446	311,042,897	1,174,950,568	1,084,764,375	1,889,755,357	773,802,519
Illinois:		1929 15,333	836,347	8,840	135,932	691,555	2,807,001	308,723,888	1,325,054,479	3,198,957,824	6,220,082,240
1927 14,711		18,593	804,805	15,232	136,409	2,656,987	2,653,468	914,102,612	2,921,092,107	1,54,373,036	5,386,033,235
1919 10,961						653,114	1,654,947	801,087,359	3,485,270,446	125,889,392	5,425,244,694
Michigan:		1929 6,686	602,988	3,809	69,144	589,085	2,356,746	201,283,914	840,505,363	2,558,374,167	4,656,718,042
1927 5,300		8,305	549,069	6,762	471,342	1,214,747	2,585,536	760,502,319	2,346,213,125	9,445,941,268	1,067,343,879
1919 7,431						2,193,747	1,919,243,243	1,862,906,680	66,337,153	3,406,188,483	1,546,945,240
Wisconsin:		1929 3,133	3,742	44,632	264,745	1,239,394	115,033,424	352,490,833	1,206,840,087	1,161,664,893	2,156,681,769
1927 7,473		10,393	317,899	7,951	45,989	247,722	1,018,228	322,697,105	1,133,327,588	43,006,060	949,841,682
1919 7,951						375,949	37,537,742	1,127,274,861	1,048,883,069	42,406,892	820,327,301
WEST NORTH CENTRAL:											
Minnesota:		1929 4,315	126,469	2,178	20,817	605,704	122,418,195	768,215,329	741,454,482	26,763,847	404,995,277
1927 3,886		6,225	147,678	5,138	26,927	98,833	384,338	123,619,251	726,299,744	1,626,727,215	340,336,471
1919 8,225						115,927	45,359,926	127,106,505	883,689,777	22,422,478	235,639,958
Iowa:		1929 3,817	99,311	1,887	15,786	866,760	31,768	973,692	556,592,882	17,800,847	322,819,543
1927 3,061		5,683	105,439	5,333	19,485	242,820	90,117,169	520,240,807	506,034,871	14,205,936	745,472,697
1919 5,211						105,439	34,043,860	90,117,169			225,231,890
Missouri:		1929 5,765	243,773	3,170	37,723	202,879	717,978	91,008,198	240,308,692	1,111,265,172	1,917,155,275
1927 5,422		8,592	244,939	7,076	42,226	185,378	473,680	230,017,241	1,004,700,533	97,025,154	1,665,173,463
1919 6,384						105,376	78,044,450	196,515,373	1,056,457,164	1,029,812,101	1,364,354,174
North Dakota:		1929 373	5,211	194	983	4,024	19,756	5,687,028	39,684,462	38,573,190	55,321,592
1927 307						3,260	16,187	4,508,122	34,271,002	33,258,479	47,003,022
1919 894						4,572	774	5,403,350	44,486,499	43,477,254	57,373,022
South Dakota:		1929 615	8,204	401	1,208	6,535	31,287	2,558,447	75,016,424	1,472,246	97,697,636
1927 472						24,676	6,648	63,619,877	62,252,564	1,307,613	88,001,463
1919 1,414						22,176	2,076,199	42,985,870	41,821,013	1,14,857	62,170,782
Nebraska:		1929 1,491	35,682	930	6,540	28,212	16,187	5,687,028	36,881,112	1,111,266	15,637,130
1927 127						4,572	774	5,403,350	44,486,499	43,477,254	57,373,022
1919 2,884						1,438	1,438	4,503,350	44,486,499	43,477,254	57,373,022
Kansas:		1929 1,916	58,619	1,278	9,908	47,373	295,487	21,861,198	54,246,575	12,141,970	205,366,619
1927 1,474						3,368	2,406,241	326,296,219	45,086,755	47,373,122	16,581,570
1919 3,474						12,398	3,562	55,745,935	59,925,689	56,042,498	115,268,376
Kansas:		1929 1,777	77,009	3,562	12,398	61,049	233,945	21,795,653	59,925,689	56,042,498	115,268,376

GENERAL SUMMARY

SOUTH ATLANTIC:			
Delaware.....	26,828	272	3,004
1929 460	21,324	114,961	8,344,542
1927 446	29,035	103,166	25,222,182
1919 668	563	85,103	7,709,068
Maryland.....	3,344		
1929 153,276	2,370	19,807	131,098
1927 3,205	165,375	20,404	126,700
District of Columbia.....	563	5,129	140,342
1929 547	4,250	9,752	44,916
1919 503	14,101	3,104	39,471
Virginia.....	1929 3,287	133,908	2,322
1927 2,432	139,178	5,900	11,313
1919 5,603	11,926	119,352	120,273
West Virginia.....	1929 1,488	94,359	794
1927 3,113	93,688	2,524	8,239
1919 2,785	83,036	8,128	85,325
North Carolina.....	1929 3,797	228,959	2,534
1927 5,984	175,423	6,076	16,599
1919 5,909	11,688	115,659	209,826
South Carolina.....	1929 1,659	114,989	1,113
1927 1,059	86,360	5,069	108,777
Georgia.....	1929 4,179	175,081	3,347
1927 3,175	141,012	4,776	153,774
1919 4,803	123,441	12,765	154,168
Florida.....	1929 2,212	72,777	1,432
1927 1,912	52,986	6,477	64,888
1919 2,582	2,616	74,415	61,219
East South Central:	1929 2,446	89,958	1,375
Kentucky.....	1927 1,881	83,954	4,003
1919 3,957	10,611	10,475	318,765
Tennessee.....	1929 2,855	142,915	1,895
1927 2,068	114,908	13,620	128,400
1919 4,889	13,300	13,241	475,243
Mississippi.....	1929 1,911	57,807	1,539
1927 1,833	4,892	4,081	59,056
West South Central:	1919 2,455	64,452	2,811
Louisiana.....	1929 1,989	98,475	924
1927 1,624	57,560	1,371	10,206
1919 2,617	112,523	2,042	14,216
Oklahoma.....	1929 1,658	17,996	5,393
1927 1,717	107,522	107,522	134,498
Texas.....	1929 5,198	169,210	3,067
1927 4,065	130,911	6,491	2,320

See footnotes at end of table

CENSUS OF MANUFACTURES: 1929

TABLE 4.—GENERAL STATISTICS FOR ALL INDUSTRIES, BY GEOGRAPHIC DIVISIONS AND BY STATES: 1929, 1927, AND 1919—Continued

DIVISION AND STATE	Con-	Number of es-	PERSONS ENGAGED IN MANUFACTURING INDUSTRIES ¹			COST OF MATERIALS, CONTAINERS FOR PROD- UCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value added by manufac- ture ²	
			Propri- etors and firm mem- bers ³	Salari- ed officers and employ- ees ¹	Horse- power	Salaries ¹	Wages	Total		
MOUNTAIN:										
Montana:	1929	589	17,465	330	2,266	14,869	197,731	\$5,254,612	\$209,845,438	
	1927	605	17,465	330	2,382	14,942	188,590	30,915,203	151,791,508	
	1919	1,230	20,602	1,200	17,160	153,489	7,741,465	24,742,502	122,151,024	
Idaho:	1929	562	17,358	335	1,375	15,848	105,787	3,036,272	22,451,545	
	1927	470	17,358	335	1,513	89,880	18,970,643	47,387,197	51,863,505	
	1919	922	16,268	851	1,500	13,917	73,840	2,701,547	18,548,272	
Wyoming:	1929	248	7,281	127	886	6,258	46,677	2,288,632	10,255,365	
	1927	229	7,281	127	886	6,577	40,191	4,011,234	6,065,022	
	1919	576	8,605	667	894	6,634	11,885	1,702,268	11,188,979	
Colorado:	1929	1,548	39,980	807	6,223	32,890	233,726	13,580,172	43,640,403	
	1927	1,483	39,980	807	6,223	32,890	233,726	13,580,172	43,640,403	
	1919	2,631	44,729	2,234	7,241	35,254	206,110	13,045,975	42,074,379	
New Mexico:	1929	250	5,234	104	594	4,476	23,147	1,266,139	5,561,981	
	1927	200	5,234	104	594	4,553	21,467	5,421,441	10,055,852	
	1919	387	6,646	386	574	4,736	17,260	1,027,841	6,658,462	
Arizona:	1929	348	12,400	191	1,659	10,550	180,637	4,268,232	15,074,528	
	1927	300	12,400	191	1,659	10,550	180,637	4,268,232	15,074,528	
	1919	480	10,347	416	1,403	8,967	100,641	12,014,769	77,995,198	
Utah:	1929	651	18,833	323	2,909	15,601	123,737	6,407,917	19,698,684	
	1927	556	18,833	323	2,909	15,601	121,233	16,585,574	120,567,348	
	1919	1,160	23,107	1,068	3,160	18,968	92,797	5,680,365	21,455,397	
Nevada:	1929	123	2,634	70	384	2,210	27,197	813,640	3,955,425	
	1927	116	2,634	70	384	2,419	21,974	8,523	3,915,155	
	1919	166	3,568	136	308	3,119	19,374	587,865	4,318,022	
Pacific:	Washington:	1929	3,672	130,878	2,138	13,910	114,830	35,904,583	160,670,891	
	1927	3,344	130,878	2,138	13,910	114,830	104,665	683,073	145,930,930	
	1919	4,918	150,479	4,165	13,356	162,023	164,916	30,375,766	194,968,222	
Oregon:	1929	2,463	75,567	1,702	8,360	65,505	413,334	19,412,371	86,828,968	
	1927	1,779	75,567	1,702	8,360	57,179	339,511	13,996,171	75,716,972	
	1919	2,707	68,006	2,540	6,906	58,559	303,795	13,996,171	206,206,041	
California:	1929	12,019	362,028	9,089	62,018	290,911	1,569,086	184,048,164	422,099,248	
	1927	10,086	362,028	9,089	62,018	262,916	1,339,695	243,451	378,321,461	
	1919	11,942	246,858	12,432	40,714	243,692	1,765,108	305,207,389	75,420,269	

¹ Data for employees of central administrative offices are included in the totals and in the numbers of salaried employees for 1919 for the United States and for each State, but are not included for 1927 or for 1929. The total number of such employees, as reported for 1929, was 208,363, and their compensation amounted to \$60,437,331. The corresponding data for 1919 can not be segregated, and no such data were collected for 1927. The numbers of proprietors and firm members and the numbers of salaried employees and the amounts of their salaries were not tabulated for States at the census for 1927.

² Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

GENERAL SUMMARY

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TABLE 5.—GENERAL STATISTICS, BY INDUSTRIES, FOR THE UNITED STATES: 1929, 1927, AND 1919

[Data for establishments with products valued at \$500 or more but less than \$5,000 are included in the 1919 figures for individual industries but not in the United States totals. No data for such establishments are included in any of the figures for 1927 or 1929]

INDUSTRY	Cen-	Num-	PERSONS ENGAGED IN THE				Horse-	Salaries ¹	Wages	Cost of	Value of	Value added					
			Cen-	sus-	ber of	estab-	lish-	Propri-	Salaried	Wage	materials,	products ²	by manu-				
year	estab-	lish-	sus-	ber of	estab-	firm	mem-	bers	and em-	ployees	for the	year)	for the	year)	and pur-	energy ³	facture ⁴
			Total	Propri-	eters	Salaried	Wage	earners	Horse-	power	Dollars	Dollars	Dollars	Dollars	Dollars		
All industries, total.....	1929	210,950	10,330,728	133,210	1,358,775	8,838,743	42,931,061	3,595,064,001	11,620,973,264	38,549,679,732	70,434,808,443	31,885,288,711					
	1927	191,866	9,783,438	132,681	1,301,002	8,949,765	38,825,681	3,220,524,618	10,548,802,532	35,133,136,839	62,718,347,289	27,685,210,400					
	1919	214,383	10,688,849	250,571	1,438,219	9,000,059	29,327,669	2,880,308,375	10,461,780,869	37,232,702,300	62,041,735,310	24,809,002,926					
Agricultural implements.....	1929	293	47,623	107	5,853	41,003	128,499	18,399,184	58,941,980	113,923,484	277,854,462	163,884,978					
	1927	277	38,661	91	5,224	33,346	117,966	11,217,674	46,415,450	85,066,186	202,732,128	117,065,040					
	1919	521	67,177	321	12,488	54,368	128,249	21,925,743	66,704,434	144,571,943	304,961,265	180,389,322					
Aircraft and parts.....	1929	132	18,035	15	3,910	14,710	16,505	9,524,258	21,923,844	27,368,103	71,152,924	43,784,821					
	1927	70	5,499	13	1,064	4,422	6,031	2,290,054	6,857,014	7,517,188	21,161,853	13,644,670					
	1919	31	4,202	14	645	3,643	12,512	2,000,090	4,900,740	7,120,905	14,372,043	7,245,078					
Alcohol, ethyl, and distilled liquors.....	1929	30	1,833	1	368	1,484	13,877	1,195,111	2,131,188	35,046,063	54,284,065	19,238,602					
	1927	28	1,479	3	296	1,180	7,261	806,813	1,704,518	19,309,772	33,971,150	14,601,378					
	1919	34	1,741	2	359	1,380	10,494	1,137,784	1,716,099	10,665,522	31,854,085	12,198,563					
Aluminum manufactures.....	1929	150	28,788	61	2,517	21,210	107,846	5,749,124	29,692,727	94,036,463	163,457,248	50,420,785					
	1927	139	16,945	54	2,003	14,798	71,907	5,117,624	20,891,943	79,338,569	123,557,112	43,718,603					
	1919	83	18,257	34	1,821	11,402	30,280	3,306,674	13,327,306	49,271,861	75,277,048	20,006,037					
Ammunition and related products.....	1929	21	7,905	3	739	7,223	17,001	1,785,523	8,272,018	19,941,605	43,808,520	23,008,856					
	1927	20	8,475	873	7,602	17,175	2,003,477	8,265,903	20,945,130	45,602,184	24,657,054						
	1919	42	27,471	10	4,046	22,818	30,128	7,607,151	23,587,692	38,101,602	88,038,223	49,930,021					
Artificial and preserved flowers and plants.....	1929	191	3,779	128	435	3,210	625	1,257,510	3,217,042	5,527,451	14,425,420	8,897,969					
	1927	190	5,494	186	503	4,715	541	1,459,958	5,050,388	7,888,853	19,576,337	11,687,504					
	1919	224	4,876	234	504	4,138	408	851,700	3,740,011	7,004,046	16,143,165	9,138,610					
Artificial leather.....	1929	17	3,180	-----	570	2,500	14,650	1,043,071	3,055,702	22,267,938	32,961,252	10,603,314					
	1927	19	3,282	-----	552	2,730	14,467	1,525,700	4,006,013	21,827,645	34,228,101	12,400,456					
	1919	17	2,361	1	339	2,011	4,952	832,335	2,163,171	18,132,204	26,281,986	8,149,762					
Artists' materials.....	1929	68	1,510	36	307	1,167	8,307	921,156	1,428,728	4,155,317	9,459,565	5,304,248					
	1927	61	1,578	37	330	1,211	8,260	706,477	4,129,083	3,771,508	8,204,521	4,433,018					
	1919	58	1,205	40	239	926	3,206	578,936	805,764	2,087,228	5,507,666	2,782,430					
Asbestos products, other than steam packing and pipe and boiler covering.....	1929	87	9,287	9	1,136	8,002	40,458	3,110,603	10,778,712	25,408,002	56,104,036	30,750,034					
	1927	62	7,103	9	757	5,337	26,525	2,081,209	8,375,502	21,517,740	44,168,388	22,688,648					
	1919	46	4,105	11	630	3,654	9,657	1,598,733	3,731,074	12,047,702	23,077,557	11,029,855					
Asphalted-felt-base floor covering.....	1929	14	2,754	1	408	2,345	11,002	1,124,057	3,601,238	14,278,805	31,888,902	17,610,157					
	1927	12	2,834	1	391	2,442	8,904	814,020	3,694,808	10,180,489	34,100,585	17,914,120					
Awnings, tents, sails, and canvas covers.....	1929	1,002	9,980	813	2,014	7,162	4,995	4,719,834	8,559,321	25,328,140	49,237,576	23,009,436					
	1927	963	6,326	920	1,863	6,543	4,850	4,103,267	8,229,302	24,409,718	47,929,352	21,519,034					
	1919	895	8,413	871	1,614	6,028	4,571	3,002,147	5,858,523	20,901,140	45,800,300	18,729,250					
Bags, other than paper, not made in textile mills.....	1929	202	13,578	103	1,647	11,828	19,159	4,734,471	9,044,876	144,275,477	170,175,893	25,900,416					
	1927	181	12,803	94	1,545	11,104	15,764	4,189,781	9,548,317	136,748,406	162,049,887	26,201,431					
	1919	216	12,642	166	1,720	10,766	9,070	4,093,062	7,756,682	176,071,500	214,069,474	38,041,014					
Bags, paper, exclusive of those made in paper mills.....	1929	95	7,861	18	873	6,970	13,418	2,347,743	6,661,235	43,238,592	64,621,192	21,852,800					
	1927	88	7,323	27	833	6,403	9,386	2,112,010	6,393,675	40,734,599	57,480,652	16,755,053					
	1919	76	5,087	41	878	4,168	4,429	2,176,366	3,662,830	33,350,481	47,263,000	12,913,509					
Baking powders, yeast, and other leavening compounds.....	1929	48	3,667	8	653	3,006	42,788	2,400,825	4,840,730	22,508,378	52,336,812	29,738,434					
	1927	47	4,030	15	992	3,032	42,816	2,676,793	4,793,024	24,619,450	55,716,025	31,076,875					
	1919	88	4,803	52	1,510	3,331	20,071	2,807,416	3,584,584	26,635,429	46,230,312	10,504,883					
Baskets and rattan and willow ware, not including furniture.....	1929	273	10,155	172	630	9,353	20,180	1,448,216	6,671,089	8,820,166	22,851,043	14,030,877					
	1927	236	10,081	153	633	9,295	17,821	1,480,750	6,607,806	9,231,144	21,729,900	12,407,756					
	1919	375	5,370	400	437	4,533	6,310	1,803,646	3,369,086	4,904,241	11,821,167	6,916,026					
Belting other than leather and rubber, not made in textile mills.....	1929	9	383	6	122	255	1,648	405,346	298,010	1,328,090	2,788,627	1,400,537					
	1927	11	504	6	155	343	1,457	531,398	410,698	1,489,841	3,211,875	1,722,034					
Belting, leather.....	1929	207	3,511	94	815	2,002	6,826	2,368,594	3,549,721	20,679,778	35,631,682	14,951,904					
	1927	178	3,022	97	761	2,164	6,728	2,018,941	2,925,416	16,185,267	27,205,752	11,080,485					
	1919	172	4,019	91	1,163	2,765	7,012	2,695,779	3,260,439	25,166,711	40,480,654	12,323,043					
Beverages.....	1929	5,154	40,606	4,534	7,791	28,281	149,166	19,581,606	38,314,414	103,026,180	270,828,803	107,297,623					
	1927	4,769	38,878	4,759	7,147	26,072	153,731	17,158,450	36,100,954	95,430,198	242,694,456	147,264,268					
Billiard and pool tables, bowling alleys, and accessories.....	1929	40	1,625	28	209	1,390	6,402	428,480	1,802,917	3,238,396	8,821,363	5,652,987					
	1927	34	1,409	21	204	1,184	5,335	415,853	1,771,845	2,383,543	7,111,871	4,717,878					
	1919	49	2,327	43	183	2,101	5,261	2,711,408	6,109,103	14,041,840	25,284,072	11,242,232					
Blacking, stains, and dressings.....	1929	170	2,466	83	766	1,617	3,317	2,025,888	1,959,443	8,345,234	24,681,836	16,336,602					
	1927	176	2,577	107	754	1,718	4,005	1,771,845	2,180,733	9,185,543	22,548,235	13,362,692					
	1919	220	3,765	170	1,181	2,455	2,446	2,619,283									

CENSUS OF MANUFACTURES: 1929

TABLE 5.—GENERAL STATISTICS, BY INDUSTRIES, FOR THE UNITED STATES: 1929, 1927, AND 1919—Continued

(See note at head of this table)

INDUSTRY	Cen-	Num-	PERSONS ENGAGED IN THE INDUSTRY				Horse-	Salaries ¹	Wages	Cost of materials, containers for products, fuel, and purchased electric energy ²	Value of products ³	Value added by manu-		
			Cen-	sus-	estab-	lish-	ments	Total	Prop-	Salaried	Wage	power	Salaries ¹	Wages
Bookbinding and blank-book making	1929	1,108	29,405	676	4,065	24,754	21,741	10,854,665	31,779,037	30,754,777	102,783,405	72,028,628		
	1927	1,063	26,477	927	3,641	21,909	19,038	8,832,184	28,281,066	25,875,185	87,327,392	61,452,207		
	1919	1,113	25,287	1,111	3,816	20,361	11,037	7,453,912	18,658,821	23,285,171	66,020,677	42,785,506		
Boot and shoe cut stock, not made in boot and shoe factories	1929	210	10,639	160	980	9,409	15,828	2,288,824	10,319,996	107,545,777	133,447,914	25,902,137		
	1927	201	9,938	192	1,135	8,011	13,718	2,381,255	9,354,040	97,966,431	121,022,421	23,055,080		
	1919	252	11,512	234	1,503	9,715	8,448	3,328,226	9,124,778	183,887,270	161,203,310	27,316,034		
Boot and shoe findings, not made in boot and shoe factories	1929	382	12,037	228	1,435	10,376	20,250	3,866,441	11,058,252	31,964,401	58,625,445	26,061,044		
	1927	379	11,789	255	1,584	9,050	18,021	3,384,188	11,201,872	31,862,322	57,483,389	25,571,067		
	1919	427	10,615	424	1,250	8,941	9,970	2,018,598	8,187,106	40,428,347	62,825,408	22,397,061		
Boots and shoes, other than rubber	1929	1,341	225,701	406	19,595	205,640	140,320	44,284,882	222,407,732	515,055,246	965,922,094	450,867,448		
	1927	1,357	224,004	568	20,320	203,110	138,700	43,343,517	225,090,242	494,553,016	944,714,463	450,161,447		
	1919	1,449	237,107	888	25,175	211,049	116,886	68,124,906	210,734,610	715,269,315	1,155,041,436	439,772,121		
Boots and shoes, rubber	1929	22	29,278	—	3,610	25,659	62,603	7,745,144	29,945,265	34,396,400	102,537,625	68,141,159		
	1927	22	30,267	—	3,419	26,848	68,359	5,180,763	32,078,955	43,372,916	124,607,801	81,234,885		
	1919	25	37,929	1	5,053	32,875	49,400	7,401,888	30,882,722	50,346,880	116,917,434	66,570,554		
Boxes, cigar, wooden	1929	118	4,740	98	268	4,374	5,518	814,228	3,507,711	5,238,209	12,459,425	7,221,216		
	1927	136	5,014	105	332	4,577	5,478	794,052	3,925,320	5,020,725	12,908,739	7,288,014		
	1919	180	5,701	187	358	6,218	6,008	797,525	3,512,236	6,336,540	13,110,213	6,773,673		
Boxes, paper, not elsewhere classified	1929	1,249	63,894	440	7,800	55,654	80,004	22,314,874	57,109,700	159,839,577	294,253,296	134,413,719		
	1927	1,219	61,640	512	7,739	50,398	81,300	20,738,057	57,700,664	168,463,709	306,555,002	138,091,268		
	1919	1,201	63,408	767	6,779	55,862	64,675	15,572,451	48,326,554	101,135,292	206,419,343	105,284,051		
Boxes, wooden, except cigar boxes	1929	702	33,581	488	2,589	30,554	127,261	7,281,078	29,193,575	74,081,987	135,025,675	60,943,788		
	1927	748	33,662	883	2,482	30,707	135,637	6,684,242	29,250,351	75,797,392	133,992,877	58,195,485		
	1919	1,140	46,897	849	8,003	42,445	143,583	8,654,038	36,811,185	102,946,235	177,818,454	74,872,219		
Bread and other bakery products	1929	20,785	244,070	21,588	21,041	200,841	355,623	40,884,765	274,561,581	737,099,500	1,526,110,811	789,011,311		
	1927	18,129	211,113	19,481	18,687	171,995	284,244	46,739,072	236,225,862	693,236,163	1,394,700,224	701,464,061		
	1919	25,005	200,642	27,908	31,142	141,502	165,711	48,819,906	158,237,050	713,230,411	1,161,896,318	438,656,907		
Brooms	1929	407	5,405	380	474	4,542	4,672	1,097,040	4,160,087	9,647,688	19,166,353	9,518,665		
	1927	394	5,388	388	550	4,450	4,401	1,157,459	4,274,688	9,176,710	18,444,912	9,289,202		
	1919	1,034	8,536	1,162	1,061	0,313	6,037	1,940,126	5,708,886	17,905,109	30,205,267	12,840,168		
Brushes, other than rubber	1929	303	8,947	188	1,498	7,261	11,915	4,240,287	7,062,588	21,688,253	45,549,270	23,861,017		
	1927	302	8,459	202	1,584	7,678	12,093	3,752,200	8,244,032	22,553,068	47,844,124	25,291,080		
	1919	370	9,041	330	1,643	7,968	7,307	3,648,504	7,113,201	19,598,133	39,005,607	19,407,474		
Butter	1929	3,527	27,934	1,307	7,530	19,007	164,413	12,489,080	24,197,840	635,873,580	746,417,620	110,544,034		
	1927	3,510	28,048	1,279	7,573	20,006	145,973	11,597,609	25,632,586	637,386,688	739,010,876	101,674,191		
	1919	3,738	26,339	2,006	6,692	17,641	94,962	9,522,089	514,345,730	688,168,017	68,817,272			
Buttons	1929	242	10,055	127	804	9,034	14,615	2,442,244	8,813,927	11,601,401	28,977,919	17,476,618		
	1927	229	10,662	181	889	9,642	15,890	2,174,099	9,435,821	11,237,579	29,130,108	17,892,589		
	1919	557	17,758	575	1,006	15,577	15,700	8,349,328	13,772,500	16,745,357	41,840,459	25,095,102		
Candles	1929	20	941	4	156	781	1,971	501,787	923,039	3,250,627	6,686,194	3,435,567		
	1927	17	932	11	212	700	996	642,518	761,464	2,958,987	6,360,931	3,391,944		
	1919	19	666	18	112	541	597	287,832	437,581	2,178,528	3,350,806	1,172,278		
Canning and preserving: Fish, crabs, shrimps, oysters, and clams	1929	348	14,898	128	1,158	13,012	21,092	2,806,704	8,799,058	53,239,011	80,848,513	27,608,602		
	1927	337	13,099	165	1,194	12,650	18,574	2,409,203	8,105,581	42,891,556	65,082,187	22,190,831		
	1919	475	14,138	326	1,373	12,487	25,880	3,051,628	9,505,019	53,993,789	80,260,423	26,286,634		
Canning and preserving: Fruits and vegetables; pickles, jellies, preserves, and sauces	1929	2,097	110,551	1,755	9,030	98,800	224,097	22,133,970	74,978,500	462,002,128	750,342,041	288,270,913		
	1927	2,436	91,518	1,614	8,860	80,924	189,831	19,257,409	62,309,660	356,185,602	572,345,862	217,160,260		
	1919	3,805	94,125	3,883	12,806	77,486	164,631	21,717,036	56,939,004	548,027,502	180,361,544			
Car and general construction and repairs, electric-railroad repair shops	1929	446	31,982	—	2,507	29,476	70,424	5,423,874	47,108,710	32,781,113	85,481,577	52,700,464		
	1927	515	34,137	—	2,553	31,594	73,357	5,249,032	48,391,897	30,421,479	84,504,448	54,082,089		
	1919	624	33,120	1	1,847	31,272	53,805	2,970,367	39,073,154	32,025,484	76,210,701	43,185,217		
Car and general construction and repairs, steam-railroad repair shops	1929	1,861	308,655	—	29,074	308,681	1,076,723	76,171,019	590,202,724	515,602,452	1,184,495,282	608,872,810		
	1927	1,794	432,147	—	35,059	307,058	1,037,404	591,070	60,916,555	515,000,190	725,070,275	1,205,190,710	690,120,435	
	1919	1,744	516,279	2	31,340	484,437	591,070	66,948,100	687,617,312	515,803,210	1,279,235,393	763,432,188		
Carbon paper and inked ribbons	1929	67	1,781	21	509	1,251	3,042	1,530,423	1,702,358	7,990,753	17,295,140	9,304,387		
	1927	40	1,610	20	421	1,078	3,267	1,113,835	1,514,230	6,019,758	13,793,128	7,773,370		
Cardboard, not made in paper mills	1929	13	820	1	210	600	1,540	853,208	819,178	2,665,258	5,629,498	2,904,240		
	1927	9	807	1	238	658	1,779	783,260	848,807	2,808,056	5,581,164	2,713,108		
	1919	16	1,714	2	287	1,425	3,261	743,723	1,337,177	4,953,915	9,138,415	4,184,500		
Card cutting and designing	1929	70	2,853	45	470	2,338	3,900	1,383,196	2,725,047	9,285,931	19,648,179	10,362,248		
	1927	60	2,805	51	450	2,024	3,915	1,227,601	2,706,033	7,544,043	16,871,312	9,327,269		
	1919	75	1,397	69	180	1,148	743	442,902	958,877	2,298,389	5,323,349	3,024,060		
Carpets and rugs, rag	1929	94	1,866	83	254	1,520	2,418	480,070	1,562,372	1,658,937	5,510,768	3,851,831		
	1927	110	2,006	92	281	1,633	2,005	611,189	1,677,572	1,636,371	5,890,265	4,253,894		
	1919	330	2,710	391	309	2,016	2,659	883,870	1,550,501	2,037,874	5,597,057	3,550,183		
Carpets and rugs, wool, other than rag	1929	67	35,051	10	2,418	32,623	65,205	7,359,683	40,014,207	86,650,892	176,915,364	90,264,472		
	1927	65	34,022	9	1,784	32,820	65,823	5,416,434	42,040,892	85,601,83				

GENERAL SUMMARY

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TABLE 5.—GENERAL STATISTICS, BY INDUSTRIES, FOR THE UNITED STATES: 1929, 1927, AND 1919—Continued

(See note at head of this table)

INDUSTRY	Cen-sus year	Num-ber of es-tab-lish-ments	PERSONS EN-GAGED IN THE IN-DUSTRY				Horse-power	Salaries ¹	Wages	Cost of materials, containers for products, fuel and purchased electric energy ²	Value of products ³	Value added by manu-fac-ture ⁴
			Total	Pro-prietors and firm mem bers	Salaried officers and em-ployees ¹	Wage car-ners (ave rage for the year)						
Carriages and sleds, children's.....	1929	79	7,009	15	702	7,102	10,895	\$1,900,574	\$8,313,356	\$13,514,787	\$8,817,800	\$15,303,073
	1927	89	7,812	24	758	7,030	10,309	1,757,505	7,813,648	13,895,080	12,668,145	14,773,050
	1919	103	7,613	65	702	6,686	6,071	1,744,085	6,229,038	11,700,163	24,506,596	12,806,438
Carriages, wagons, sleighs, and sleds.....	1929	88	3,465	22	570	2,873	14,890	\$1,417,087	\$8,417,903	\$8,468,294	\$16,449,870	\$7,091,555
	1927	117	4,074	48	639	3,387	18,207	1,502,142	4,211,610	10,648,271	19,422,236	8,773,904
Cars, electric and steam railroad, not built in railroad repair shops.....	1929	147	46,116	3	6,008	40,015	238,455	\$13,305,728	\$6,337,382	223,889,397	\$28,220,204	\$104,330,807
	1927	135	44,275	3	6,244	38,031	236,415	13,851,043	60,624,856	209,112,561	112,508,598	103,300,037
	1919	100	62,068	3	6,847	55,218	107,180	14,508,243	82,416,737	368,143,487	156,664,807	188,521,320
Cash registers and adding, calculating, and card-tabulating machines.....	1929	40	20,188	9	3,339	16,840	28,267	\$2,280,453	\$29,745,805	\$10,706,013	\$110,000,086	\$9,234,073
	1927	41	17,792	5	3,415	14,372	21,054	8,712,951	21,756,004	11,132,191	106,844,969	\$9,712,778
	1919	65	18,958	26	2,388	16,644	14,645	3,982,670	22,537,265	10,880,998	88,539,026	72,049,027
Caskets, coffins, burial cases, and other morticians' goods.....	1929	414	15,300	154	2,173	13,038	39,609	\$6,475,756	\$16,411,027	\$39,350,294	\$8,281,872	\$48,931,573
	1927	340	13,830	130	2,044	11,605	31,105	5,640,433	14,420,508	33,327,460	74,890,850	41,562,381
	1919	351	14,646	225	2,481	11,390	22,190	5,831,208	11,450,957	31,695,287	64,377,133	32,781,846
Cast-iron pipe.....	1929	72	21,030	9	1,286	10,741	69,757	\$3,750,877	\$22,551,778	\$34,289,365	\$80,260,560	\$45,971,185
	1927	82	24,188	5	1,280	22,892	63,196	8,427,122	25,082,196	48,224,070	95,088,622	46,808,652
	1919	59	13,777	4	1,148	12,625	25,741	2,431,212	14,705,398	25,330,552	50,235,101	24,848,540
Cement.....	1929	174	38,756	4	5,384	33,368	1,183,080	\$13,095,102	\$48,849,096	\$5,242,497	\$27,509,260	\$172,206,763
	1927	101	42,884	6	6,556	36,322	1,069,380	10,331,586	53,110,745	120,012,025	293,566,293	\$173,553,268
	1919	123	30,247	9	4,714	25,524	488,808	9,496,801	33,194,920	79,500,800	175,264,910	95,756,110
Cereal preparations.....	1929	121	8,204	46	1,070	6,488	66,201	\$3,355,063	\$8,875,622	101,471,521	\$175,223,126	\$73,751,605
	1927	77	7,245	35	1,182	6,028	50,979	6,215,105	8,417,246	91,748,332	155,563,288	\$8,814,954
	1919	105	10,019	45	3,240	7,634	46,992	5,748,813	8,508,870	117,838,248	159,223,405	41,385,217
Cheese.....	1929	2,758	5,786	1,524	861	8,401	24,739	\$850,419	4,588,087	\$22,727,217	\$110,644,732	\$17,017,515
	1927	2,758	5,830	1,241	835	835	20,076	708,903	4,807,205	100,787,583	118,447,757	\$17,660,174
	1919	3,580	6,963	2,400	596	3,097	24,411	1,050,043	4,808,991	129,425,265	143,455,704	14,080,499
Chemicals, not elsewhere classified.....	1929	551	75,558	41	13,318	62,190	854,358	\$35,024,780	\$94,680,013	\$63,570,811	\$73,048,380	\$74,471,575
	1927	492	62,604	53	10,294	52,347	576,285	28,182,303	78,274,975	296,077,164	572,090,732	275,418,568
	1919	830	95,272	154	18,200	76,018	480,435	30,088,501	105,062,201	301,519,182	614,278,849	312,750,067
Chewing gum.....	1929	87	2,850	7	587	2,265	10,350	1,462,151	2,732,940	23,281,172	\$60,100,126	\$30,028,054
	1927	40	3,269	12	733	2,624	10,097	1,086,285	2,727,236	27,107,504	\$62,001,320	\$34,833,816
	1919	62	4,056	23	813	3,190	6,172	1,847,630	2,079,803	25,202,312	51,240,166	20,037,844
China firing and decorating, not done in potteries.....	1929	27	407	22	68	317	53	145,073	420,303	640,301	1,554,003	\$18,642
	1927	31	464	26	72	306	43	147,950	428,232	681,053	1,692,079	1,010,426
	1919	43	321	45	32	244	48	81,025	244,211	310,785	860,702	555,977
Chocolate and cocoa products, not including confectionery.....	1929	50	7,072	4	810	6,249	63,236	2,408,263	7,778,061	79,540,371	\$110,540,003	\$80,991,322
	1927	60	7,350	5	918	6,427	62,742	2,758,082	7,339,405	90,492,852	122,723,229	\$32,800,377
	1919	48	10,287	21	1,183	9,083	83,414	4,058,083	9,270,077	101,754,466	139,268,206	\$37,603,830
Cigars and cigarettes.....	1929	1,636	115,957	1,518	9,131	105,303	49,517	\$19,765,530	\$85,823,298	\$385,778,023	\$1,066,908,888	\$710,130,805
	1927	1,997	128,345	1,882	10,289	116,174	35,819	19,800,453	94,580,211	335,350,075	945,523,702	630,107,627
	1919	9,920	161,097	10,464	11,860	138,773	24,497	22,302,437	111,313,349	353,297,360	773,062,405	420,305,129
Clay products (other than pottery) and nonclay refractories.....	1929	1,749	102,055	530	8,189	93,336	533,887	\$21,330,306	106,918,327	\$81,709,742	\$294,934,513	\$213,255,771
	1927	1,840	109,933	600	8,411	100,972	529,681	21,808,695	121,067,507	\$99,839,060	\$19,907,843	\$220,038,174
	1919	2,414	86,503	1,649	7,939	76,015	405,187	15,840,907	78,256,045	67,488,113	208,422,020	140,934,807
Cleaning and polishing preparations.....	1929	420	4,505	168	1,024	2,713	10,600	4,340,271	3,366,161	19,309,041	\$5,770,632	\$31,330,501
	1927	341	8,993	182	1,408	2,403	8,485	3,549,621	2,088,430	15,219,035	41,234,406	26,014,831
	1919	499	4,264	356	1,953	1,955	4,510	3,098,314	1,898,447	12,023,518	26,703,109	13,776,691
Clocks, clock movements, time-recording devices, and time stamps.....	1929	56	11,943	4	1,538	10,401	12,451	3,827,459	12,481,894	10,075,113	42,165,875	\$1,400,762
	1927	52	11,268	7	1,396	9,865	9,510	3,507,361	11,750,620	10,062,765	38,195,803	28,183,038
	1919	46	9,260	11	997	8,252	6,952	1,998,374	7,861,611	7,177,813	23,380,100	16,202,377
Clothing (except work clothing), men's, youths' and boys', not elsewhere classified.....	1929	3,601	169,143	3,952	15,323	149,868	40,325	41,904,877	179,768,803	\$44,504,970	\$91,104,205	\$40,509,226
	1927	3,562	165,708	4,231	18,378	146,059	34,351	43,040,189	184,613,090	447,244,035	832,181,718	434,937,083
Clothing, men's, buttonholes.....	1929	82	342	36	14	292	104	26,570	314,192	60,792	573,909	513,117
	1927	40	404	47	35	412	132	71,325	428,817	98,029	917,932	819,903
	1919	107	685	131	20	484	176	64,578	514,600	123,266	1,090,049	966,783
Clothing, women's, not elsewhere classified.....	1929	8,082	222,404	7,689	27,215	187,500	35,291	83,916,680	243,851,143	934,413,683	1,709,530,505	\$776,166,822
	1927	7,588	187,404	8,386	24,610	154,459	30,287	82,269,316	211,349,759	809,580,125	1,464,401,044	694,880,910
	1919	7,711	202,243	10,366	26,223	165,649	32,421	59,055,975	528,196,894	808,400,844	1,208,543,128	528,130,284
Clothing, work (including sheep-lined and blanket-lined work coats but not including shirts), men's.....	1929	511	41,106	323	2,672	38,201	11,492	6,219,073	26,647,078	83,551,715	138,450,078	\$4,898,863
	1927	550	43,948	423	2,918	40,612	11,218	6,232,951	29,945,915	85,184,183	147,289,025	62,164,842
Cloth sponging and refinishing.....	1929	48	1,083	20	161	902	800	550,463	1,457,104	88,340	3,361,221	3,272,881
	1927	52	941	29	176	736	933	604,017	1,502,111	160,770	3,457,938	3,297,159
	1919	67	1,454	55	193	1,268	927	612,363	1,584,661	178,161	3,890,858	3,612,697
Coffee and spice, roasting and grinding.....	1929	928	13,702	430	4,303	9,063	45,465	12,006,828	332,150,200	424,344,837	92,194,637	
	1927	784	13,003	428	4,445	8,195	42,542	12,215,938	9,587,473	284,652,793	884,281,300	90,628,513
	1919	704	20,187	556	9,091	10,540	29,706	16,504,017	9,201,242	243,890,108	304,791,077	60,892,569
Coke, not including gas-house coke.....	1929	153	23,508	5	2,951	20,552	303,211	7,451,438	33,389,426	281,592,430	416,348,458	\$134,756,028
	1927	171	23,809	-----	2,727	21,082	451,874	7,200,470	34,167,692	288,728,701	382,012,617	95,283,810
	1919	278	32,882	41	3,522	20,319	224,879	7,605,785	42,299,202	224,260,674	316,515,838	

CENSUS OF MANUFACTURES: 1929

TABLE 5.—GENERAL STATISTICS, BY INDUSTRIES, FOR THE UNITED STATES: 1929, 1927, AND 1919—Continued
[See note at head of this table]

INDUSTRY	Con-	Num-	PERSONS ENGAGED IN THE				Horse-	Salaries ¹	Wages	Cost of	Value added	
			bus-	ber of	estab-	lish-ments				containers for products, fuel, and purchased electric energy ²	products ²	by manu- facture ³
Collapsible tubes.....	1929	17	1,968	—	—	147	1,821	2,272	\$66,996	\$1,782,024	\$8,912,977	\$3,527,071
	1927	17	2,169	—	—	185	1,984	2,849	650,000	1,918,055	7,103,927	4,246,783
Collars, men's.....	1929	15	3,192	7	233	2,052	1,281	341,353	2,263,335	3,630,168	\$8,740,396	5,110,228
	1927	24	3,006	18	318	3,270	3,131	652,086	2,986,938	5,866,677	13,264,207	7,397,530
	1919	39	12,562	37	1,422	11,103	5,270	2,012,039	7,430,729	10,424,056	47,564,940	28,130,854
Combs and hairpins, not made from metal or rubber.....	1929	24	793	16	121	658	1,015	267,083	640,857	1,006,824	2,482,419	1,475,595
	1927	36	1,474	15	200	1,259	1,501	491,550	1,240,064	1,873,003	4,436,656	2,563,653
	1919	45	2,475	38	208	2,229	1,588	486,327	1,806,453	3,108,818	6,566,305	3,397,547
Compressed and liquefied gases.....	1929	354	6,440	3	3,056	3,390	85,203	5,662,732	5,378,211	14,528,603	52,189,779	37,661,176
	1927	313	5,756	3	2,541	3,212	70,439	4,779,887	4,947,577	11,748,839	50,547,396	38,798,556
Concrete products.....	1929	2,498	21,607	1,734	3,453	16,505	67,651	8,349,404	22,688,062	34,035,184	92,900,749	58,865,565
	1927	2,330	22,980	1,866	3,306	17,808	54,342	7,462,907	24,897,709	33,913,086	93,259,206	59,346,120
	1919	2,785	12,570	3,055	1,446	8,378	22,178	2,290,980	9,310,899	13,918,317	33,064,382	19,751,015
Condensed and evaporated milk.....	1929	535	8,530	38	1,433	7,065	85,258	2,885,342	8,705,620	163,780,818	209,100,700	45,322,882
	1927	464	8,763	21	1,352	7,300	63,969	2,505,997	9,190,599	169,680,081	200,086,091	40,406,010
	1919	401	16,533	46	2,812	13,075	49,178	5,645,566	14,277,060	282,505,292	339,506,774	56,911,482
Confectionery.....	1929	2,021	73,940	1,222	0,217	63,501	112,644	23,585,475	56,442,674	215,192,474	383,269,849	178,077,375
	1927	1,908	74,525	1,383	0,970	63,163	110,505	24,504,704	56,980,548	218,372,553	301,927,343	173,554,790
	1919	3,149	93,982	3,146	14,343	76,493	77,036	31,244,470	54,401,057	252,433,691	447,726,103	195,292,412
Cooperage.....	1929	586	11,964	303	970	10,091	33,885	2,548,874	11,705,704	41,515,500	64,841,788	23,326,268
	1927	528	12,685	261	969	11,455	33,553	2,554,208	12,937,460	43,821,250	66,947,424	23,126,174
	1919	1,099	15,300	941	1,209	13,219	30,688	2,923,177	14,052,224	58,520,655	88,236,061	29,715,406
Copper, tin, and sheet-iron work, including galvanized-iron work, not elsewhere classified.....	1929	2,161	37,063	1,516	6,064	28,503	53,749	18,413,534	43,254,611	112,648,112	222,484,825	109,836,513
	1927	1,081	32,065	1,623	5,915	24,527	35,880	14,685,751	38,667,690	98,385,897	101,128,636	92,742,730
	1919	4,700	38,559	5,056	5,863	27,040	24,190	11,009,498	33,866,823	80,898,528	160,313,045	76,415,417
Cordage and twine.....	1929	123	15,915	17	1,409	14,489	73,021	3,095,968	12,833,551	54,573,260	91,455,117	36,881,858
	1927	116	16,608	19	1,405	15,084	74,924	3,855,000	13,674,081	56,105,063	89,172,495	33,067,482
	1919	120	16,232	29	1,581	17,622	66,556	4,015,501	14,700,001	89,705,282	133,366,476	43,061,194
Cork products.....	1929	35	4,265	12	411	3,842	14,829	902,800	4,208,674	12,002,522	23,023,329	10,420,807
	1927	27	3,582	4	373	3,185	11,688	874,273	3,500,013	9,395,123	17,368,825	7,973,702
	1919	62	4,061	30	488	3,545	8,556	1,028,030	3,387,114	9,134,960	16,282,239	7,147,286
Corn sirup, corn sugar, corn oil, and starch.....	1929	35	8,227	0	1,488	0,730	84,686	4,130,268	9,872,009	104,284,827	165,988,739	61,668,912
	1927	26	8,257	3	1,282	6,972	51,003	3,075,505	10,489,679	90,905,776	134,461,166	43,555,390
	1919	56	8,694	37	862	7,795	52,036	2,212,362	11,902,483	130,328,848	186,256,260	55,927,412
Corsets and allied garments.....	1929	213	15,058	99	2,195	13,064	0,048	6,233,226	12,446,334	36,035,070	76,802,199	40,767,120
	1927	222	16,289	131	2,330	13,778	7,819	5,309,850	12,402,288	35,304,422	77,218,202	41,823,780
	1919	188	21,751	98	3,238	18,416	6,950	7,150,167	13,082,242	39,810,868	75,544,959	36,720,156
Cotton goods.....	1929	1,281	430,101	91	14,094	424,916	2,269,346	41,020,722	324,280,994	898,028,977	1,524,177,087	626,148,110
	1927	1,347	480,817	167	13,054	407,599	2,328,830	38,154,444	328,909,543	871,591,901	1,567,400,612	695,808,711
	1919	1,283	445,423	230	14,218	430,966	1,830,398	37,304,478	355,474,937	1,277,785,597	2,126,272,193	847,486,596
Cotton small wares.....	1929	202	16,680	60	1,330	15,281	27,308	4,015,407	15,449,435	33,636,208	65,169,753	31,533,545
	1927	220	16,621	103	1,558	14,988	29,205	4,514,817	15,333,332	32,222,020	64,810,905	32,587,945
Crucibles.....	1929	11	413	—	92	321	1,880	310,540	430,141	1,035,414	2,044,724	1,009,310
	1927	11	300	—	102	258	1,688	370,452	328,552	772,165	1,982,136	1,200,980
	1919	6	289	—	50	239	608	100,739	257,119	1,045,718	2,146,230	1,100,518
Cutlery (not including silver and plated cutlery) and edge tools.....	1929	230	17,005	111	1,903	14,991	40,886	5,414,060	17,651,202	14,789,335	78,680,872	63,871,537
	1927	230	17,853	115	1,011	15,832	43,419	4,710,217	18,392,154	18,130,385	76,888,444	58,508,059
	1919	304	22,529	173	2,497	19,859	38,555	4,740,961	20,048,465	19,477,437	66,629,570	47,152,133
Dairymen's supplies; creamery, cheese-factory, and butter-factory equipment; poultrymen's and apiarists' supplies.....	1929	172	7,210	96	1,664	5,450	13,672	3,810,437	6,025,320	16,371,116	42,246,758	25,875,642
	1927	152	6,587	66	1,430	5,091	13,576	3,352,138	6,373,561	15,686,293	36,828,648	21,137,355
	1919	244	8,614	164	2,018	6,437	11,756	3,504,400	7,078,433	18,526,743	37,397,448	18,870,705
Dental goods and equipment.....	1929	87	5,555	33	958	4,550	6,216	2,710,592	5,359,432	17,326,748	35,180,165	17,863,417
	1927	97	4,634	61	714	3,759	3,792	1,057,884	3,941,289	18,188,584	32,348,976	14,160,395
Doors, shutters, and window sash and frames, metal.....	1929	148	11,940	33	2,859	9,557	25,027	7,199,256	17,005,422	30,178,161	72,160,388	41,982,227
	1927	117	10,109	29	2,030	8,050	20,626	6,053,343	15,564,458	25,602,288	65,279,973	39,677,735
	1919	57	2,000	22	561	2,077	4,013	1,258,034	2,729,774	4,577,934	10,877,001	6,299,067
Druggists' preparations.....	1929	420	14,753	135	3,930	10,688	19,448	11,417,020	12,452,066	43,775,986	124,778,487	81,002,501
	1927	373	14,770	154	4,478	10,138	15,919	10,372,755	11,042,409	40,499,392	110,309,139	69,809,747
	1919	524	22,669	283	6,718	15,668	12,670	13,318,488	12,101,926	55,138,475	114,593,486	69,455,011
Drug grinding.....	1929	26	844	5	162	677	5,277	599,422	840,935	5,675,079	9,660,220	3,994,141
	1927	25	837	9	160	659	4,662	555,020	820,187	5,683,720	9,205,243	3,521,523
	1919	31	1,601	16	298	1,347	6,723	797,042	1,526,137	11,556,480	16,937,698	5,381,218
Dyeing and finishing textiles.....	1929	732	89,047	217	10,103	70,327	204,057	31,274,906	94,244,685	235,712,150	465,820,620	230,108,473
	1927	743	88,457	287	9,330	73,861	287,212	27,002,701	91,697,210	210,650,900	406,047,372	195,380,472
	1919	628	62,588	363	6,240	55,985	159,857	16,251,555	57,189,978	174,742,815	323,967,683	149,224,868
Electrical machinery, apparatus, and supplies.....	1929	1,802	405,053	464	75,867	328,722	893,510	170,847,326	450,377,020	971,017,623	2,300,915,572	1,320,897,949
	1927	1,777	306,998	915	64,487	241,506	661,188	148,248,907	336,238,750	645,761,690	1,637,807,085	991,545,336
	1919	1,404	271,912	473	59,005	212,374	438,082	98,180,439				

GENERAL SUMMARY

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TABLE 5.—GENERAL STATISTICS, BY INDUSTRIES, FOR THE UNITED STATES: 1929, 1927, AND 1919—Continued

[See note at head of this table.]

INDUSTRY	Cen- sus year	Num- ber of estab- lish- ments	PERSONS ENGAGED IN THE INDUSTRY				Horse- power	Salaries ¹	Wages	Cost of materials, containers for products, fuel, and purchased electric energy ²	Value of products ²	Value added by man- ufacture ³
			Total	Propri- etors and firm mem- bers	Salaried officers and em- ployees ¹	Wage earners (average for the year)						
Embroideries	1929	813	8,161	819	720	6,622	2,279	Dollars 1,830,075	Dollars 7,867,008	Dollars 6,608,840	Dollars 25,286,796	Dollars 18,677,956
	1927	1,069	11,234	1,273	997	8,964	2,030	2,050,191	10,962,090	7,959,769	32,418,888	24,459,110
Emery wheels and other abrasive and polishing appliances	1929	67	4,980	16	1,091	3,873	18,113	2,990,160	5,820,143	12,416,063	32,154,311	19,737,048
	1927	68	3,956	15	680	3,261	13,404	1,628,266	4,608,107	10,830,073	24,181,837	18,341,864
	1919	60	6,921	20	1,300	5,601	12,963	2,387,470	5,878,748	12,228,187	30,949,270	18,721,083
Engines, turbines, tractors, and water wheels	1929	109	72,207	27	11,032	61,148	287,079	28,260,279	98,705,080	202,900,430	457,217,600	254,317,230
	1927	215	63,433	33	9,050	51,341	241,788	22,467,103	84,790,771	165,202,801	387,878,588	202,675,787
	1919	370	96,286	93	18,676	77,617	190,005	30,912,039	105,435,455	217,550,771	464,774,735	247,228,964
Engravers' materials	1929	19	383	3	67	313	1,493	270,807	448,385	1,794,504	3,120,483	1,334,670
	1927	17	245	3	64	178	864	186,464	203,962	1,280,201	2,108,737	870,470
	1919	21	252	11	67	174	733	166,179	212,171	1,484,200	2,248,122	703,853
Engraving (other than steel, copperplate, or wood), chasing, etching, and diesinking	1929	189	2,833	182	411	2,240	2,905	1,328,075	3,211,743	2,583,039	10,933,741	8,350,702
	1927	173	2,295	164	326	1,805	2,028	949,941	2,012,484	2,078,160	7,930,088	6,852,528
	1919	478	2,656	633	245	1,878	1,750	491,604	2,391,504	1,927,328	7,360,002	5,423,278
Engraving, steel and copperplate, and plate printing	1929	456	12,498	317	2,051	10,130	8,506	5,936,587	14,480,730	11,804,704	47,161,041	35,200,877
	1927	393	10,567	311	1,707	8,549	6,894	4,350,765	11,885,737	10,236,216	39,071,105	28,834,859
	1919	421	8,770	370	1,395	7,014	5,353	2,870,317	7,908,100	6,680,747	24,209,164	17,228,407
Engraving, wood	1929	27	200	30	28	142	54	73,860	323,211	82,250	738,951	656,701
	1927	23	194	26	36	132	45	77,316	200,777	76,364	641,487	565,088
	1919	55	387	62	90	235	67	152,162	407,215	210,268	1,183,618	934,350
Envelopes	1929	171	12,432	38	2,027	10,367	13,077	5,424,490	11,520,840	20,927,088	61,286,002	31,359,300
	1927	153	11,490	31	1,718	9,745	11,391	4,176,574	10,754,636	28,078,192	56,006,225	27,033,033
	1919	106	9,493	33	1,331	8,129	7,124	2,708,311	6,640,089	21,064,743	39,064,077	17,609,334
Excelsior	1929	66	1,301	54	98	1,241	10,667	272,214	1,210,144	2,430,630	5,008,769	2,509,239
	1927	64	1,433	42	110	1,272	10,930	312,588	1,181,488	2,647,114	4,821,068	2,273,084
	1919	95	1,491	81	108	1,242	10,332	320,041	1,144,503	2,521,007	4,913,460	2,391,483
Explosives	1929	95	6,433	28	701	5,614	51,612	2,226,360	8,487,890	31,764,307	72,530,724	40,775,417
	1927	100	6,690	25	802	5,803	38,230	2,272,514	8,131,284	36,808,576	72,480,008	35,590,092
	1919	118	15,429	28	6,182	9,249	51,635	18,244,224	12,504,080	46,011,040	92,474,818	46,563,704
Fancy and miscellaneous articles, not elsewhere classified	1929	814	21,900	472	2,775	18,722	11,071	7,072,209	10,040,511	35,130,854	85,388,061	50,249,107
	1927	595	20,290	467	2,867	16,965	10,802	8,615,477	18,200,510	34,673,611	83,006,481	48,332,820
	1919	661	17,140	606	2,573	13,961	8,657	5,622,198	12,207,913	32,601,073	64,054,481	31,403,408
Feathers, plumes, and manufactures thereof	1929	39	332	23	52	257	100	127,144	300,693	386,356	1,141,418	755,002
	1927	38	416	32	62	322	103	136,102	306,693	534,149	1,438,441	904,292
	1919	216	4,224	239	481	3,504	602	1,023,364	3,405,765	6,694,506	15,377,063	8,083,367
Feeds, prepared, for animals and fowl	1929	760	14,736	352	4,101	10,223	170,482	0,570,006	12,821,380	327,910,743	402,762,534	74,832,791
	1927	447	11,567	180	3,746	7,032	115,865	7,772,435	0,702,054	244,675,705	209,792,042	55,116,037
Felt goods, wool, hair, or jute	1929	54	6,185	8	637	5,540	25,655	2,506,186	7,531,298	26,223,907	45,406,823	19,241,856
	1927	50	6,014	7	555	5,452	23,479	2,201,490	6,653,147	23,289,338	41,804,844	18,005,506
	1919	49	5,034	8	690	5,280	10,411	2,087,342	4,873,490	22,780,775	39,229,540	10,448,765
Fertilizers	1929	638	25,116	130	4,061	20,026	166,084	0,307,707	17,883,925	150,801,105	232,510,930	72,700,741
	1927	621	22,711	119	3,980	18,612	150,274	8,936,036	17,640,601	138,142,925	100,354,890	52,241,905
	1919	600	32,522	219	6,007	26,296	125,939	11,571,600	25,363,132	185,040,522	231,143,587	90,103,065
Files	1929	33	4,299	6	310	3,974	12,001	981,668	5,230,808	3,052,675	14,114,378	11,061,703
	1927	36	4,268	11	300	3,948	10,979	845,927	5,144,087	3,135,955	12,073,734	9,837,770
	1919	50	6,343	24	562	5,707	11,897	955,113	6,192,444	4,227,880	17,616,663	13,388,683
Firearms	1929	21	7,747	1	908	6,838	15,427	1,970,971	9,200,551	4,117,009	21,970,367	17,855,208
	1927	20	6,885	1	754	6,130	15,747	1,678,624	7,933,030	5,047,555	19,462,372	14,404,817
	1919	26	12,534	9	1,238	11,287	20,107	2,094,183	13,333,495	7,613,784	30,181,370	22,507,586
Fire extinguishers, chemical	1929	28	1,084	8	336	740	1,464	907,375	958,570	4,187,524	8,506,080	4,378,505
	1927	26	1,193	6	355	832	1,504	607,132	1,192,708	4,009,775	8,036,150	4,026,381
	1919	32	1,128	10	332	777	846	751,110	2,083,416	5,503,180	2,809,704	
Fireworks	1929	50	2,002	16	175	1,811	1,746	463,215	1,930,595	2,464,617	5,583,502	4,118,885
	1927	36	1,710	8	135	1,564	1,800	367,070	1,395,024	2,623,672	5,884,930	3,261,267
	1919	57	1,306	20	148	1,222	1,005	828,274	994,511	2,108,166	4,020,984	2,521,828
Flags and banners	1929	54	1,169	21	190	938	577	439,488	794,328	1,771,320	3,825,824	2,004,504
	1927	46	1,258	35	177	1,046	1,746	463,215	1,930,595	2,282,466	4,536,348	2,253,602
	1919	79	1,345	60	220	1,065	778	480,960	795,242	3,280,165	5,340,080	2,059,924
Flavoring extracts and flavoring syrups	1929	642	7,847	302	2,504	5,041	33,838	7,748,504	7,070,860	55,517,926	120,086,237	73,568,311
	1927	500	7,887	219	2,057	5,011	27,963	7,137,663	7,134,274	51,000,727	107,210,395	50,128,068
	1919	602	6,771	432	2,753	3,588	6,553	5,230,083	2,962,566	50,416,804	76,928,050	26,500,846
Flax and hemp, dressed	1929	6	62	2	13	47	429	18,428	35,406	93,477	107,035	103,558
	1927	7	77	5	10	62	664	12,912	51,390	116,166	282,396	160,729
	1919	20	491	26	45	420	1,920	87,691	447,373	1,708,670	2,360,114	860,444
Flour and other grain-mill products	1929	4,022	39,120	3,334	8,704	27,028	641,456	20,594,965	35,072,386	808,872,500	1,000,269,418	191,300,849
	1927	4,035	43,730	3,602	10,146	29,982	641,608	22,281,064	37,559,472	972,711,040	1,148,760,360	170,049,320
	1919	10,708	75,709	11,937	18,351	45,481	875,404	32,013,030	50,888,383	1,793,180,987	2,052,434,386	263,253,308
Food preparations, not elsewhere classified	1929	802	14,376	571	3,180	10,016	8,716	8,792,802	11,057,726	98,887,639	171,860,987	75,478,348
	1927	674	13,942	456	3,192	10,294	34,773	7,785,967	11,386,636	98,248,740	166,964,672	68,715,932

See footnotes at end of table.

CENSUS OF MANUFACTURES: 1929

TABLE 5.—GENERAL STATISTICS, BY INDUSTRIES, FOR THE UNITED STATES: 1929, 1927, AND 1919—Continued

[See note at head of this table]

INDUSTRY	Cen-	Num-	PERSONS ENGAGED IN THE				Horse-	Salaries ¹	Wages	Cost of	Value of	Value added			
			Cen-	sus-	ber of	estab-	lish-	Total	Propri-	Salaried	Wage	power	Salaries ¹	Wages	by manu-
year	estab-	lish-	sus-	ber of	estab-	lish-	men-	members	and firm-	officers	earners	(average	for the	electric	facture ³
Forgings, iron and steel, not made in plants operated in connection with rolling mills.	1929	218	23,555	43	2,630	20,882	147,491	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	
	1927	219	17,972	53	2,325	16,594	127,975	8,715,750	34,505,349	71,606,964	150,248,947	84,041,083	52,033,724	52,033,724	
	1919	261	33,536	70	4,831	29,135	104,870	7,206,330	23,589,551	52,101,996	105,085,719	93,557,994	93,557,994	93,557,994	
Foundry and machine-shop products, not elsewhere classified.	1929	8,605	545,377	3,687	87,240	454,441	1,804,886	247,857,074	697,508,589	1,088,065,092	2,791,461,904	1,753,395,872	1,753,395,872	1,753,395,872	
	1927	8,025	454,084	4,181	81,828	428,678	1,567,240	212,246,076	590,622,020	878,771,144	2,268,655,817	1,589,882,073	1,589,882,073	1,589,882,073	
	1927	8,380	490,285	4,367	81,979	403,930	1,501,934	215,394,586	601,022,908	883,651,784	2,291,545,110	1,407,891,376	1,407,891,376	1,407,891,376	
	1919	10,934	577,308	7,682	86,879	482,767	1,040,265	181,776,328	622,571,120	948,069,381	2,289,250,889	1,341,181,478	1,341,181,478	1,341,181,478	
Foundry supplies.	1929	50	1,151	10	288	853	9,394	980,500	1,255,801	5,534,548	10,458,580	4,924,041	4,924,041	4,924,041	
	1927	51	1,355	12	412	941	11,133	1,006,313	1,200,141	6,535,050	11,035,060	5,066,010	5,066,010	5,066,010	
	1919	70	1,331	23	402	906	6,327	887,522	1,032,029	5,067,236	9,954,678	4,287,440	4,287,440	4,287,440	
Fuel: Briquettes and boulets.	1929	23	515	—	89	426	14,893	265,252	584,020	9,018,799	9,497,057	3,578,858	3,578,858	3,578,858	
	1927	20	331	—	87	274	9,594	162,748	446,511	4,873,195	7,203,410	2,830,215	2,830,215	2,830,215	
	1919	11	228	—	67	171	5,180	134,110	221,645	1,386,394	1,973,377	587,483	587,483	587,483	
Fur goods.	1929	2,865	28,014	3,101	4,101	15,752	5,511	12,757,711	38,320,965	170,106,910	277,592,752	101,485,842	101,485,842	101,485,842	
	1927	2,750	24,488	3,755	4,003	16,640	5,655	10,092,886	37,670,610	195,322,988	299,615,047	104,292,069	104,292,069	104,292,069	
	1919	1,816	19,834	2,527	3,608	13,639	5,327	7,993,146	24,149,212	105,590,805	173,137,739	67,541,134	67,541,134	67,541,134	
Furnishing goods, men's, not elsewhere classified.	1929	598	20,582	468	2,526	26,588	7,086	7,460,130	23,009,391	83,631,818	150,983,803	67,881,785	67,881,785	67,881,785	
	1927	534	28,712	430	3,093	25,183	7,190	6,553,571	22,070,330	82,839,408	145,474,143	62,634,737	62,634,737	62,634,737	
	1919	487	22,530	503	3,083	18,944	5,650	8,115,308	13,562,566	64,743,012	107,834,695	43,000,783	43,000,783	43,000,783	
Furniture, including store and office fixtures.	1929	3,778	219,799	1,833	24,517	193,399	503,970	70,847,629	242,832,098	426,454,169	948,116,358	521,682,180	521,682,180	521,682,180	
	1927	3,228	212,256	1,576	22,537	188,143	455,881	61,188,728	238,240,167	302,098,510	885,204,300	403,105,781	403,105,781	403,105,781	
	1919	3,270	162,600	2,408	16,940	140,252	205,186	44,176,520	143,152,217	265,725,010	579,806,396	814,181,386	814,181,386	814,181,386	
Furs, dressed.	1929	248	6,121	174	780	5,187	10,769	3,081,603	8,596,377	18,048,954	40,237,192	21,588,238	21,588,238	21,588,238	
	1927	172	6,458	100	818	5,540	12,407	2,808,429	10,360,867	7,071,850	27,680,635	20,608,756	20,608,756	20,608,756	
	1919	141	5,079	127	477	5,075	5,421	1,504,541	7,098,286	6,398,835	20,384,669	14,045,734	14,045,734	14,045,734	
Galvanizing and other coating, not done in plants operated in connection with rolling mills.	1929	65	1,302	24	213	1,125	2,266	673,380	1,503,716	3,939,417	7,086,541	3,727,124	3,727,124	3,727,124	
	1927	59	1,170	26	191	953	2,057	588,927	1,448,940	3,722,411	6,950,855	3,228,444	3,228,444	3,228,444	
	1919	52	1,005	33	267	1,685	1,571	601,841	2,247,953	10,532,288	14,473,082	3,043,394	3,043,394	3,043,394	
Gas and electric fixtures; lamps, lanterns, and reflectors.	1929	614	28,600	270	4,750	23,580	40,200	13,710,800	83,268,595	57,918,407	144,965,706	87,047,299	87,047,299	87,047,299	
	1927	481	20,082	261	4,791	21,030	31,291	12,638,807	29,260,824	55,605,645	127,802,407	72,193,862	72,193,862	72,193,862	
	1919	512	22,113	337	3,621	18,155	22,278	7,132,926	19,004,877	88,087,571	80,360,870	41,070,290	41,070,290	41,070,290	
Gas machines, gas meters, and water and other liquid meters.	1929	72	7,475	7	1,367	6,101	11,028	8,834,617	8,931,625	15,187,488	40,828,344	25,435,856	25,435,856	25,435,856	
	1927	58	7,125	4	1,208	5,915	10,427	3,229,073	8,792,384	15,690,977	36,715,100	21,124,213	21,124,213	21,124,213	
	1919	105	7,076	24	1,463	5,580	8,586	2,750,353	5,995,377	10,647,402	26,207,074	15,619,072	15,619,072	15,619,072	
Gas, manufactured, illuminating and heating.	1929	754	65,624	—	22,550	43,065	544,024	40,774,202	60,160,926	188,416,183	512,652,595	324,286,412	324,286,412	324,286,412	
	1927	828	75,285	—	20,758	48,407	496,014	45,514,425	68,356,448	211,785,523	516,705,170	304,019,047	304,019,047	304,019,047	
	1919	1,022	63,828	27	20,393	42,908	238,454	25,172,453	52,758,628	157,550,882	329,278,908	171,728,206	171,728,206	171,728,206	
Glass.	1929	263	78,427	31	5,869	67,527	341,978	15,686,531	87,705,111	103,288,943	303,818,560	200,524,617	200,524,617	200,524,617	
	1927	269	71,533	79	5,629	65,825	318,298	13,868,782	81,352,784	108,911,464	282,394,380	172,482,806	172,482,806	172,482,806	
	1919	371	88,656	60	6,070	77,620	207,938	13,864,569	87,526,625	90,780,124	261,884,080	171,103,966	171,103,966	171,103,966	
Glass products (except mirrors) made from purchased glass.	1929	431	7,335	301	1,005	6,020	6,767	2,726,382	7,814,551	16,318,638	33,278,030	16,954,370	16,954,370	16,954,370	
	1927	400	5,605	343	707	4,405	8,316	1,006,852	6,214,552	8,778,568	22,927,581	16,549,013	16,549,013	16,549,013	
	1919	616	8,248	531	1,237	6,480	5,042	2,138,100	6,154,831	14,357,878	28,443,321	14,085,443	14,085,443	14,085,443	
Gloves and mittens, cloth or leather combined, made from purchased fabrics.	1929	125	9,024	63	582	9,270	8,702	1,012,621	5,014,275	18,289,284	29,882,958	10,503,724	10,503,724	10,503,724	
	1927	131	10,824	72	458	10,296	4,112	656,181	6,689,708	17,392,166	30,202,152	12,809,986	12,809,986	12,809,986	
	1919	132	9,746	133	827	8,086	3,361	1,237,076	4,855,246	16,092,462	28,220,113	12,127,651	12,127,651	12,127,651	
Gloves and mittens, leather.	1929	257	10,332	231	898	9,203	3,498	2,272,323	9,203,911	20,205,740	39,122,720	18,010,980	18,010,980	18,010,980	
	1927	232	10,397	251	1,040	9,108	2,603	2,037,884	8,813,912	19,278,416	36,602,063	17,385,637	17,385,637	17,385,637	
	1919	356	12,504	405	1,504	10,685	3,288	8,008,046	8,150,784	26,286,129	46,940,511	20,054,382	20,054,382	20,054,382	
Glue and gelatin.	1929	74	3,652	14	545	2,003	23,584	1,658,419	4,236,092	18,978,027	32,468,019	13,479,992	13,479,992	13,479,992	
	1927	61	3,779	18	535	3,226	24,763	1,810,424	4,524,282	19,222,384	31,195,807	11,073,423	11,073,423	11,073,423	
	1919	62	4,906	23	618	4,264	10,079	1,378,686	4,776,724	19,270,905	32,184,067	12,844,162	12,844,162	12,844,162	
Gold leaf and foil.	1929	75	1,327	69	81	1,177	383	261,796	1,134,044	1,932,667	3,078,024	2,045,357	2,045,357	2,045,357	
	77	1,302	84	72	1,148	346	177,403	1,120,424	1,721,174	3,571,190	2,555,335	1,850,016	1,850,016	1,850,016	
	1919	87	1,140	97	99	950	408	204,592	983,600	1,250,428	4,401,568	1,806,233	1,806,233	1,806,233	
Gold, silver, and platinum, reducing and refining, not from the ore.	1929	60	1,418	46	439	931	4,230	1,303,597	1,633,838	61,570,093	67,959,140	6,389,047	6,389,047	6,389,047	
	1927	67	1,140	32	31										

GENERAL SUMMARY

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TABLE 5.—GENERAL STATISTICS, BY INDUSTRIES, FOR THE UNITED STATES: 1929, 1927, AND 1919—Continued

[See note at head of this table]

INDUSTRY	Cen-sus-year	Num-ber-of estab-lishments	PERSONS ENGAGED IN THE INDUSTRY				Horse-power	Salaries 1	Wages	Cost of materials, containers for products, fuel, and purchased electric energy 2	Value of products 3	Value added by manu-fac-ture 4	
			Total	Propri- etors and firm mem- bers	Salaried officers and em- ployees	Wage earners (average for the year)							
Handkerchiefs	1929	105	6,525	60	451	6,014	2,409	1,172,201	4,035,901	16,342,735	29,553,777	13,211,042	
	1927	115	7,314	71	584	6,659	2,605	1,330,522	5,204,147	18,205,237	31,588,220	13,382,083	
Hand stamps and stencils and brands	1929	332	4,112	211	930	2,971	3,506	2,346,875	4,080,780	3,811,158	15,036,023	11,224,865	
	1927	283	3,963	220	1,075	2,068	3,169	2,388,187	3,841,771	3,733,718	14,155,607	10,421,880	
	1919	382	3,341	377	828	2,136	1,848	2,261,287	3,148,667	9,336,558	6,187,801		
Hardware not elsewhere classified	1929	485	60,250	124	7,820	52,306	112,705	19,768,563	67,702,255	76,480,210	229,477,507	152,997,297	
	1927	485	55,050	188	7,028	47,834	99,874	17,313,654	60,827,474	71,877,065	208,253,588	136,376,531	
	1919	585	53,027	340	6,507	46,180	74,240	13,121,350	49,273,740	62,816,388	108,061,444	105,846,036	
Hat and cap materials, men's	1929	112	2,937	77	206	2,564	5,164	958,415	2,875,718	17,308,115	25,030,943	7,725,323	
	1927	96	3,116	87	207	2,762	5,168	934,490	2,658,871	15,671,792	23,339,841	7,667,549	
	1919	133	3,484	134	341	3,000	4,027	960,127	3,132,671	16,643,919	26,521,212	8,877,293	
Hats and caps, except felt and straw, men's	1929	576	7,279	584	880	5,826	1,796	2,314,648	7,004,078	16,907,661	35,900,664	18,908,003	
	1927	598	8,015	701	1,014	6,300	1,999	2,436,033	9,120,433	20,702,286	41,213,065	20,511,699	
	1919	700	6,752	931	1,282	7,539	1,687	2,765,690	9,438,864	24,176,514	44,539,861	20,333,347	
Hats, fur-felt	1929	159	18,272	72	1,661	16,539	19,894	5,677,530	22,502,542	55,208,046	102,004,165	40,706,120	
	1927	139	17,631	103	1,532	16,896	20,617	4,568,107	22,854,664	51,053,257	99,184,842	48,131,585	
	1919	176	20,318	148	1,600	18,510	20,377	4,631,672	19,642,531	40,158,019	82,745,308	42,587,289	
Hat-, straw, men's	1929	50	3,792	12	400	3,380	1,836	1,368,351	3,687,570	8,704,621	18,738,904	10,034,373	
	1927	48	3,772	11	408	3,263	1,554	1,280,030	4,282,332	11,782,960	21,717,680	9,034,733	
Hats, wool-felt	1920	14	2,202	5	169	2,028	2,811	305,830	2,314,680	4,678,180	9,055,590	4,377,401	
	1927	12	2,214	9	92	2,113	2,405	2,105	258,938	2,190,081	4,469,717	8,806,616	4,310,890
	1919	40	1,648	43	167	1,448	2,094	368,251	1,387,777	3,099,822	6,730,052	8,039,830	
Hones, whetstones, and similar products	1929	6	192	3	15	174	850	40,554	182,155	340,669	868,811	528,142	
Horse blankets, fly nets, and related products	1920	14	658	5	71	582	1,875	187,453	497,871	1,470,670	2,895,158	1,424,488	
	1927	16	737	6	71	660	1,421	170,106	574,177	1,877,898	3,376,105	1,501,209	
	1919	28	959	25	168	766	1,677	318,431	561,278	8,465,086	6,020,612	2,504,026	
House-furnishing goods, not elsewhere classified	1929	904	19,163	639	2,730	15,794	10,866	7,580,280	16,160,490	76,024,089	127,602,002	50,077,018	
	1927	548	13,058	442	1,825	11,691	12,997	4,787,552	10,947,259	52,704,736	87,676,606	34,071,870	
	1919	467	10,010	417	1,740	7,853	11,867	3,770,328	6,443,915	30,793,962	60,211,304	20,417,342	
Ice cream	1920	8,150	31,625	2,194	7,032	22,309	230,882	17,144,814	33,803,044	155,064,386	328,413,911	172,440,525	
	1927	2,061	31,065	2,362	6,776	21,927	200,815	15,457,225	33,107,615	150,602,020	301,644,901	151,042,962	
	1919	3,475	28,046	3,005	4,980	19,155	102,046	8,551,550	21,668,800	116,375,470	189,483,065	73,107,586	
Ice, manufactured	1929	4,110	40,710	1,161	7,305	32,184	1,077,295	10,820,375	42,399,295	39,808,164	210,952,264	171,144,100	
	1927	3,169	30,092	937	7,035	22,120	905,406	14,671,505	32,611,118	40,815,512	184,794,988	143,070,476	
	1919	2,867	33,605	1,560	6,702	30,247	560,926	10,082,131	34,001,837	42,877,509	137,004,798	94,127,280	
Ink, printing	1920	147	3,597	30	1,113	2,448	20,300	4,311,804	3,057,185	19,204,715	42,740,992	23,545,277	
	1927	123	3,282	30	958	2,288	18,001	3,318,552	3,005,199	16,054,110	37,734,403	21,680,388	
	1919	90	3,061	60	1,023	1,088	10,220	2,817,162	2,574,920	14,001,115	26,244,470	11,588,355	
Ink, writing	1920	29	756	14	326	416	847	635,736	479,905	1,002,573	4,504,974	2,002,401	
	1927	24	787	20	276	401	743	628,090	576,091	2,208,885	5,342,027	3,188,192	
	1919	61	1,210	55	459	702	610	957,046	500,168	3,320,340	6,438,941	3,113,695	
Instruments, professional and scientific	1929	276	21,185	124	4,185	16,876	22,810	11,014,706	22,682,052	28,411,430	80,746,369	61,334,039	
	1927	280	20,270	107	3,659	16,414	25,587	8,098,555	22,288,973	32,880,222	87,783,488	68,903,266	
	1919	351	19,787	248	3,608	15,931	12,981	7,061,640	17,400,888	19,404,634	58,136,691	38,642,057	
Iron and steel: Blast furnaces	1920	105	27,376	2,416	24,960		6,846,360	41,058,569	610,203,601	771,425,464	101,131,778		
	1927	116	30,514	2,556	27,958		7,335,957	42,258,499	579,555,038	708,904,238	120,340,202		
	1919	195	46,966	41	41,000		7,632,630	13,435,048	73,769,395	621,280,490	794,466,555	173,180,062	
Iron and steel: Steel works and rolling mills	1920	486	431,528	17	38,937	394,574	5,360,674	103,432,723	680,015,541	1,904,083,157	3,365,788,805	1,461,705,048	
	1927	480	397,347	16	36,010	361,312	5,360,674	97,199,644	601,275,499	1,689,055,205	2,779,840,238	1,090,184,943	
	1919	500	421,861	35	46,738	375,088	99,880,420	637,637,430	1,680,575,758	2,828,902,374	1,148,328,018		
Iron and steel, processed	1920	46	692	15	186	511	2,210	570,218	878,459	1,088,672	3,865,480	2,776,808	
	1927	33	331	15	85	231	1,718	218,823	862,273	509,690	1,443,280	933,609	
Ivory, shell, and bone work, not including buttons, combs, or hairpins	1920	21	444	17	38	301	642	88,627	424,783	517,326	1,260,426	743,101	
	1927	22	357	25	38	294	590	85,295	320,752	328,067	911,342	583,275	
	1919	44	901	45	104	842	870	217,750	734,932	1,203,878	2,816,530	1,522,654	
Jewelry	1920	1,536	34,797	1,340	5,635	27,022	27,402	10,090,552	38,079,810	79,804,617	177,386,032	97,582,315	
	1927	1,367	31,174	1,337	5,721	24,110	17,070	13,047,534	36,765,805	76,915,375	164,865,057	87,949,682	
	1919	2,054	30,630	2,339	6,420	30,871	15,096	14,187,847	35,863,718	110,450,683	203,930,230	98,488,547	
Jewelry and instrument cases	1920	118	2,680	101	310	2,260	1,503	982,466	2,472,880	3,324,450	8,826,727	5,502,208	
	1927	107	2,826	88	381	2,406	1,440	856,461	2,597,056	3,293,988	8,810,065	5,510,079	
	1919	142	3,166	146	286	2,734	1,075	869,120	2,147,648	3,505,840	8,126,300	4,620,460	
Jute goods	1920	20	5,830	5	394	4,931	85,079	1,033,423	4,276,143	11,067,578	21,860,757	9,902,179	
	1927	23	5,772	8	406	5,358	38,210	1,085,845	4,987,228	11,802,328	23,186,997	11,383,669	
	1919	26	7,587	13	436	7,138	32,136	1,114,015	6,436,286	17,708,834	34,442,098	16,733,864	
Knit goods	1920	1,888	223,340	823	14,020	208,488	181,879	42,846,788	210,714,335	450,700,968	899,716,672	443,015,714	
	1927	1,800	204,282	980	12,969	100,283	177,216	34,569,194	188,163,488	424,099,384	816,620,494	302,521,119	
	1919	2,050	186,673	1,438	12,613	172,572	149,438	32,326,582	125,199,820	427,006,580	713,189,680	286,044,120	

See footnotes at end of table.

CENSUS OF MANUFACTURES: 1929

TABLE 5.—GENERAL STATISTICS, BY INDUSTRIES, FOR THE UNITED STATES: 1929, 1927, AND 1919—Continued

[See note at head of this table]

INDUSTRY	Cen-	Num-	PERSONS ENGAGED IN THE				Horse-	Salaries ¹	Wages	Cost of	Value of	Value added			
			sus-	ber of	estab-	lish-	Propri-	Salaried	Wage	power	Salaries ¹	Wages	material	products ²	by manu-
	year	estab-	lish-	itors and	officers and	earners							containers for	products, fuel,	
		Total	firm	members	and em-	ployees ¹							purchased	electric	energy ²
Labels and tags	1929	153	5,528	57	907	4,474	6,473	\$3,107,478	\$5,868,952	\$10,555,074	\$28,042,325	\$17,488,651			
	1927	121	7,879	49	1,689	6,141	6,889	3,478,380	8,000,426	16,269,439	34,397,630	18,183,191			
	1919	119	6,648	73	1,348	5,227	4,033	2,458,276	4,549,902	11,274,707	24,243,992	12,966,225			
Lace goods	1929	42	7,694	4	836	6,854	10,466	\$2,800,867	\$7,670,122	\$10,112,353	\$29,237,434	\$10,125,081			
	1927	43	7,250	16	752	6,482	11,300	2,213,902	7,584,848	11,392,370	27,298,159	15,905,780			
	1919	44	7,198	8	698	6,490	9,078	2,024,441	6,086,557	13,076,994	29,306,853	16,320,859			
Lapidary work	1929	100	741	112	123	506	474	396,877	1,001,700	\$8,234,889	\$11,942,421	\$3,707,532			
	1927	92	782	101	134	547	513	366,197	1,220,047	9,188,059	12,351,503	3,218,444			
	1919	124	1,466	147	167	1,165	680	698,043	2,837,811	10,363,004	30,051,460	10,688,456			
Lasts and related products	1929	58	2,078	13	305	1,700	7,230	\$919,285	\$2,569,808	\$2,314,597	\$7,689,555	\$5,374,958			
	1927	50	2,069	22	329	1,718	7,655	905,180	2,504,116	2,505,032	7,529,149	5,024,117			
	1919	64	3,844	43	391	2,910	5,539	1,110,307	3,415,950	3,032,662	12,470,589	8,537,877			
Leather goods, not elsewhere classified	1929	392	7,210	283	802	6,035	3,106	2,582,733	6,759,742	18,013,489	35,051,013	\$17,037,524			
	1927	413	8,754	328	1,238	7,188	3,651	2,037,367	8,379,080	21,589,500	43,291,552	21,751,962			
	1919	503	11,141	483	1,708	8,945	3,840	4,022,442	9,415,403	30,035,537	52,952,772	22,017,235			
Leather: Tanned, curried, and finished	1929	471	54,316	63	4,201	49,932	229,060	\$15,049,249	63,413,707	337,597,868	481,340,299	143,742,431			
	1927	494	57,487	13	4,400	52,024	220,530	13,856,133	67,887,281	321,084,786	494,255,888	162,271,102			
	1919	680	70,292	398	6,418	72,470	217,701	20,178,072	88,205,473	646,521,527	928,501,701	282,070,174			
Lime	1929	237	9,440	54	882	8,554	90,276	\$2,049,811	9,476,314	\$13,907,760	\$35,815,058	\$21,907,898			
	1927	280	12,048	72	1,073	10,903	84,195	2,355,483	12,190,918	17,269,407	41,557,458	24,317,991			
	1919	476	12,855	340	1,101	11,405	51,735	1,095,880	10,869,196	14,206,925	33,970,463	19,073,538			
Linen goods	1929	16	2,410	—	215	2,195	11,006	535,554	2,185,339	5,214,428	9,736,898	4,522,470			
	1927	18	2,741	—	211	2,530	11,473	617,486	2,545,210	5,409,441	10,377,346	4,907,905			
	1919	10	2,070	—	180	1,890	6,069	329,325	1,635,642	4,190,187	6,998,040	2,807,859			
Litholetum	1929	7	6,384	—	1,350	5,544	51,647	2,470,590	8,560,183	27,489,253	\$5,260,449	29,761,106			
	1927	7	6,147	—	783	5,304	41,432	1,757,082	8,176,644	24,215,618	47,442,441	23,226,828			
Liquors, vinous	1929	24	254	13	55	186	1,188	282,393	277,963	608,857	2,447,912	1,839,056			
	1927	13	242	5	87	160	999	294,211	177,073	1,206,217	2,602,856	1,486,839			
	1919	342	1,661	304	286	1,011	5,189	1,370,088	1,018,398	8,115,841	17,454,194	9,338,863			
Lithographing	1929	376	23,719	92	4,648	18,979	35,471	15,510,752	32,021,919	38,992,143	121,014,321	82,022,179			
	1927	309	20,127	76	3,703	18,348	28,541	12,060,489	32,703,772	97,050,124	64,346,352				
	1919	331	19,305	160	3,537	15,618	18,550	9,112,951	18,201,089	27,718,217	73,151,115	45,432,898			
Locomotives, not made in railroad repair shops	1929	16	12,851	5	1,801	11,045	98,482	5,519,872	17,094,078	52,808,092	83,858,258	31,050,106			
	1927	17	14,611	—	1,650	12,961	148,971	4,983,851	17,648,206	45,888,450	76,719,403	31,030,953			
	1919	17	28,742	1	2,026	20,715	90,504	4,778,316	33,798,641	72,375,950	150,209,730	83,893,780			
Lubricating oils and greases, not made in petroleum refineries	1929	177	4,093	34	1,482	2,577	13,281	4,167,049	8,788,637	39,571,378	69,584,240	30,012,873			
Lumber and timber products, not elsewhere classified	1929	12,915	454,143	13,345	21,714	419,084	1,085,301	56,438,365	421,634,874	419,603,388	1,273,472,920	863,868,932			
	1927	7,510	441,793	6,514	21,333	413,946	1,781,734	51,956,991	413,361,954	493,959,120	1,214,645,683	720,686,593			
	1919	26,110	583,788	31,348	26,495	480,945	2,355,345	55,028,273	489,416,091	470,960,488	1,387,471,413	916,510,925			
Macaroni, spaghetti, vermicelli, and noodles	1929	353	6,341	377	802	5,072	24,448	2,302,760	5,394,353	27,336,120	47,074,230	10,738,104			
	1927	353	5,884	426	872	4,587	21,406	2,096,262	5,070,930	27,433,792	45,353,200	17,919,408			
	1919	557	6,226	687	996	4,543	16,693	1,707,351	4,168,000	25,109,951	37,057,198	11,947,247			
Machine-tool accessories and small metal-working tools, not elsewhere classified	1929	722	30,973	406	3,885	26,032	64,398	12,825,679	51,034,540	26,002,631	144,410,890	117,418,269			
Machine tools	1929	280	56,298	42	8,865	47,391	141,778	24,493,039	76,410,237	64,284,022	244,578,088	180,294,066			
	1927	288	59,124	55	6,086	52,383	185,426	18,274,626	47,409,555	45,161,422	145,854,921	102,703,499			
	1927	355	42,642	98	7,275	35,260	131,670	20,030,851	52,386,692	46,114,849	159,513,125	113,398,276			
	1919	403	61,762	132	8,519	53,111	100,294	18,037,856	66,178,069	59,034,308	212,400,158	153,365,850			
Malt	1929	28	742	1	151	500	18,008	613,682	1,056,759	18,923,749	23,602,938	4,670,189			
	1927	23	628	4	124	500	15,380	451,880	904,420	17,186,750	20,274,172	3,087,422			
	1919	55	1,713	8	353	1,852	27,483	1,017,501	1,845,210	31,612,707	39,340,414	7,727,707			
Marble, granite, slate, and other stone products	1929	1,681	45,258	1,525	5,918	37,817	305,915	18,405,849	63,040,864	57,037,838	192,163,916	134,526,078			
	1927	1,078	48,201	1,604	6,038	40,474	295,174	16,719,146	68,490,655	68,328,248	201,181,281	134,853,033			
	1919	4,240	42,214	4,774	4,672	32,708	169,177	8,760,854	38,354,822	40,524,341	120,164,658	79,040,312			
Matches	1929	21	4,122	1	301	3,700	17,997	802,295	4,118,003	12,526,327	20,351,026	7,824,698			
	1927	10	4,181	—	276	3,905	17,607	557,164	4,130,988	11,884,075	24,005,885	13,021,760			
	1919	21	5,126	3	1,897	8,720	12,947	1,805,995	3,059,637	6,852,970	18,495,878	11,642,006			
Mats and matting, grass and coir	1929	7	523	4	52	467	1,203	145,975	439,802	684,951	1,602,200	1,007,249			
	1927	7	478	3	63	422	1,425	115,091	398,426	688,856	1,588,567	887,711			
	1919	12	1,173	7	93	1,073	1,670	229,044	810,607	2,102,580	4,800,855	2,758,275			
Mattresses and bed springs, not elsewhere classified	1929	951	20,544	688	2,069	17,187	50,554	7,013,752	22,583,835	61,527,026	123,270,717	61,752,691			
	1927	838	16,821	615	2,725	13,481	32,937	7,003,802	16,886,711	52,182,075	98,834,558	46,652,483			
	1919	1,041	16,244	933	2,624	12,037	23,387	5,558,348	12,805,351	49,208,660	83,952,609	34,744,049			
Meat packing, wholesale	1929	1,277	146,717	863	23,349	122,505	524,980	54,738,864	105,867,420	2,974,127,757	3,434,654,098	460,526,341			
	1927	1													

GENERAL SUMMARY

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TABLE 5.—GENERAL STATISTICS, BY INDUSTRIES, FOR THE UNITED STATES: 1929, 1927, AND 1919—Continued

[See note at head of this table]

INDUSTRY	Cen-sus year	Num-ber of estab-lishments	PERSONS ENGAGED IN THE INDUSTRY			Horse-power	Salaries ¹	Wages	Cost of materials, containers for products, fuel, and purchased electric energy ¹	Value of products ²	Value added by manu-facture ³	
			Total	Propri- etors and firm mem- bers	Salaried officers and em- ployees ¹							
Minerals and earths, ground or otherwise treated.	1929	88	2,053	7	307	1,679	89,117	Dollars 1,202,305	Dollars 2,187,923	Dollars 8,937,883	Dollars 17,400,056	Dollars 8,471,173
Mirror and picture frames.	1929	178	5,226	99	681	4,446	8,334	2,206,339	5,752,190	6,532,524	10,237,897	12,705,873
	1927	166	5,208	110	620	4,460	8,228	1,748,837	5,893,073	7,056,460	10,488,721	12,432,261
	1919	429	5,929	303	823	4,708	4,050	1,726,101	4,775,227	7,227,232	18,384,562	11,157,330
Mirrors, framed and unframed.	1929	304	5,859	172	905	4,782	8,414	2,504,154	6,941,976	15,650,049	31,842,740	16,188,061
	1927	250	5,321	159	800	4,303	7,030	2,296,092	6,360,813	16,185,614	31,424,943	15,236,329
	1919	186	3,302	154	549	2,599	4,233	1,382,014	2,819,140	12,405,733	20,830,775	8,332,042
Models and patterns, not including paper patterns.	1929	804	8,484	684	1,022	6,778	12,378	3,212,408	13,233,622	5,314,359	30,621,074	25,306,715
	1927	693	7,100	725	791	5,584	11,405	2,329,054	10,544,094	4,659,266	23,494,092	18,835,726
	1919	928	8,860	1,078	833	6,049	13,750	1,908,116	10,318,104	6,395,834	25,300,880	18,004,555
Motion pictures, not including projection in theaters.	1929	142	10,639	37	8,818	10,784	40,732	60,167,520	24,800,092	38,441,025	184,102,419	145,661,304
	1927	142	10,055	42	7,598	8,415	32,100	56,298,560	18,637,005	34,867,472	134,343,860	90,475,888
Motor-vehicle bodies and motor-vehicle parts.	1929	1,154	241,813	540	10,941	221,332	824,703	57,663,412	306,503,385	856,985,637	1,557,929,763	680,944,160
	1927	213	200,895	493	18,013	181,489	551,630	49,437,407	291,200,908	841,300,502	1,151,426,805	510,119,803
	1919	2,515	163,182	2,120	18,497	132,556	250,770	34,908,340	178,056,503	362,027,302	892,170,002	330,143,300
Motor vehicles, not including motorcycles.	1929	244	253,228	36	27,076	226,116	713,912	79,865,972	306,579,233	2,401,511,763	3,722,793,274	1,321,281,511
	1927	264	213,070	30	26,030	187,910	725,074	71,118,022	321,604,003	889,426,249	2,848,442,843	950,016,594
	1919	315	242,922	36	32,327	210,559	282,323	67,215,804	312,165,870	1,578,651,574	2,887,603,287	800,251,713
Motorcycles, bicycles, and parts.	1929	21	5,117	3	722	4,392	11,124	1,754,837	6,263,870	11,281,327	23,894,805	12,013,478
	1927	29	4,598	4	697	3,897	10,753	1,542,212	5,441,502	10,174,092	21,454,149	11,280,067
	1919	51	12,200	16	1,298	10,880	14,420	2,200,358	12,703,236	25,985,015	53,105,895	27,119,980
Mucilage, paste, and other adhesives, except glue and rubber cement.	1929	84	698	47	237	414	2,564	712,860	546,926	3,068,707	6,638,387	2,069,080
	1927	80	885	42	341	502	2,219	817,712	679,468	4,270,381	7,945,403	3,075,042
Musical instrument parts and materials: Piano and organ.	1929	87	3,621	21	510	3,080	11,090	1,585,421	3,597,210	4,247,019	11,883,098	7,035,179
	1927	85	6,150	31	720	5,399	14,185	2,283,419	6,598,046	9,657,360	22,244,781	12,587,381
	1919	113	11,886	38	830	11,000	15,716	2,042,424	10,467,137	16,098,140	36,780,627	20,006,487
Musical instruments and parts and materials, not elsewhere classified.	1929	106	3,983	52	756	3,176	6,000	1,751,258	4,580,720	3,825,294	14,274,078	10,448,784
	1927	99	4,796	78	700	4,018	5,356	1,553,504	5,737,005	4,640,553	17,891,948	13,251,305
	1919	240	4,057	223	921	4,113	3,219	1,032,172	3,984,656	4,444,720	12,603,334	8,061,005
Musical Instruments: Organs.	1929	62	2,750	47	320	2,380	4,740	1,014,866	3,008,631	3,000,076	11,322,786	8,232,000
	1927	63	3,138	33	335	2,770	4,332	910,796	4,303,731	4,494,449	15,438,623	10,944,174
	1919	68	2,285	50	298	1,941	3,245	523,672	1,978,618	2,217,097	5,978,268	3,756,171
Musical Instruments: Pianos.	1929	81	11,101	9	1,122	9,970	27,193	3,357,717	14,000,826	18,860,437	42,501,375	23,034,938
	1927	124	18,343	18	1,743	16,582	29,725	4,484,208	23,800,846	33,898,668	75,490,681	41,592,013
	1919	191	26,700	33	2,770	22,957	28,697	6,307,666	25,474,200	54,304,656	107,088,050	52,723,394
Nails, spikes, etc., not made in wire mills or in plants operated in connection with rolling mills.	1929	55	2,413	10	376	2,027	9,096	1,045,014	2,553,417	5,955,061	12,854,745	6,899,084
	1927	56	2,488	25	358	2,100	8,073	959,111	2,670,016	5,156,008	11,753,468	6,606,562
	1919	65	3,941	32	564	3,355	8,971	1,177,193	3,307,662	8,874,747	17,883,844	8,708,697
Needles, pins, hooks and eyes, and snap fasteners.	1929	43	7,023	9	772	6,242	6,094	2,021,477	6,565,732	6,187,822	22,030,050	15,843,128
	1927	45	6,338	10	722	5,600	7,250	1,865,555	6,008,477	5,922,844	20,325,250	14,402,408
	1919	92	10,389	39	1,056	9,294	8,428	2,506,250	8,800,781	10,227,100	29,304,095	19,077,796
Nets and seines.	1929	19	1,048	7	138	903	1,155	314,614	708,871	3,780,356	6,164,403	2,375,047
	1927	21	1,000	11	120	869	1,162	412,786	776,326	3,347,719	5,401,178	2,053,464
	1919	19	943	5	79	859	959	209,206	561,282	3,648,206	5,114,414	1,466,208
Nonferrous-metal alloys and products, not including aluminum products.	1929	1,225	92,005	604	12,218	79,183	506,278	34,513,121	110,943,066	600,410,913	909,804,050	309,393,137
	1927	1,107	76,700	672	10,195	65,923	411,025	28,406,186	65,361,041	378,100,134	581,568,767	203,378,633
	1919	1,252	90,877	824	11,541	78,512	277,713	20,401,152	98,286,297	307,752,118	559,455,010	101,702,892
Oil, cake, and meal, cottonseed.	1929	553	19,030	34	8,180	15,825	284,305	6,732,607	11,203,227	249,010,800	208,376,039	40,356,239
	1927	647	21,665	50	3,172	18,434	270,500	6,713,857	14,258,656	220,088,487	276,338,488	66,300,051
	1919	711	32,198	145	5,282	26,766	289,981	9,935,717	20,616,198	405,192,204	581,244,794	56,052,604
Oil, cake, and meal, linseed.	1929	29	2,940	2	232	2,715	31,191	637,214	4,007,712	101,562,787	110,926,887	18,364,080
	1927	33	3,028	5	308	2,718	28,278	924,430	4,324,688	97,750,880	111,543,845	13,793,495
	1919	26	2,751	4	574	2,173	17,621	1,409,403	3,052,269	100,577,588	120,088,100	20,000,562
Oils, essential.	1929	22	867	8	94	265	1,804	306,143	325,581	3,804,228	6,653,353	2,840,125
	1927	14	225	7	40	169	758	189,726	2,258,086	3,427,384	4,641,801	1,214,527
	1919	78	493	74	98	321	1,833	228,790	391,213	3,903,417	5,698,403	1,794,980
Oils, not elsewhere classified.	1929	75	1,742	16	492	1,234	14,670	1,422,981	1,960,432	30,895,506	45,159,825	8,264,319
Oilcloth.	1929	9	1,689	—	257	1,412	5,017	625,157	2,144,067	14,924,651	23,107,272	8,182,621
	1927	8	1,264	—	192	1,072	3,665	611,558	1,745,575	11,818,024	17,642,442	5,823,818
	1919	11	1,819	4	185	1,130	4,251	403,877	1,200,877	11,140,723	16,430,875	4,296,162
Oleomargarine, not made in meat-packing establishments.	1929	41	2,120	4	582	1,534	6,670	1,390,073	2,263,700	30,890,075	46,521,823	15,631,748
	1927	36	2,071	3	568	1,502	8,746	1,281,700	2,258,404	27,145,141	39,282,364	12,137,223
	1919	42	3,868	1	1,016	2,851	9,485	1,083,666	3,184,118	66,042,792	79,815,580	13,772,788
Optical goods.	1929	117	11,243	55	1,487	9,701	15,626	4,205,251	12,633,947	11,850,128	40,562,459	28,703,331
	1927	96	9,608	38	1,874	7,596	12,401	3,991,845	9,560,725	8,865,025	32,757,210	23,392,185

See footnotes at end of table.

CENSUS OF MANUFACTURES: 1929

TABLE 5.—GENERAL STATISTICS, BY INDUSTRIES, FOR THE UNITED STATES: 1929, 1927, AND 1919—Continued
[See note at head of this table]

INDUSTRY	Cen-	Num-	PERSONS ENGAGED IN THE				Horse-	Salaries ¹	Wages	Cost of	Value of	Value added		
			Total	Propri-	firm	Salaried	Wage	earners	power	Salaries ¹	Wages	materials,	products ²	by manu-
year	year	ments		and	mem-	officers	and em-	earners				containers for	products ²	facture ³
Paints and varnishes.....	1929	1,063	42,333	234	12,888	20,211	180,315	\$3,033,685	\$42,244,695	\$34,132,065	\$68,975,838	234,843,773		
	1927	1,006	40,953	238	12,634	28,061	163,187	33,310,287	40,184,732	307,724,370	519,009,842	211,285,472		
	1919	830	34,030	208	12,225	21,507	84,827	26,522,028	24,118,159	217,12,372	340,346,803	128,234,481		
Paper.....	1929	885	115,096	32	11,744	103,320	37,623,897	\$10,398,374	\$54,607,978	\$97,186,026	\$392,578,048			
	1927	710	109,141	38	10,537	98,500	2,968,431	33,618,599	130,474,739	572,785,538	919,891,405	347,105,927		
Pulp (wood and other fiber).....	1929	198	26,625	11	1,885	24,729	2,642,806	5,844,301	\$2,670,407	148,752,729	\$28,928,279	90,175,550		
	1927	219	26,866	7	2,095	24,794		5,693,492	31,527,358	151,325,425	218,198,201	68,872,776		
Paper goods, not elsewhere classified.....	1929	436	24,618	103	4,288	20,227	67,145	12,835,089	23,810,118	100,308,676	182,647,712	82,279,086		
	1927	340	17,870	99	2,934	14,837	42,955	8,638,956	17,765,281	78,796,505	140,947,815	62,151,010		
	1919	308	17,177	124	2,918	14,185	35,300	6,741,607	12,660,024	65,205,484	107,284,769	41,989,275		
Patent or proprietary medicines and compounds.....	1929	1,522	26,120	462	9,224	16,434	44,538	25,560,155	18,780,980	94,769,833	318,906,928	224,137,095		
	1927	1,282	24,167	633	8,463	15,071	34,082	21,362,430	16,607,425	84,640,850	273,242,920	193,002,079		
	1919	2,467	31,070	1,648	12,878	17,444	25,400	24,730,212	13,748,813	88,819,417	212,102,255	123,342,888		
Paving materials: Asphalt, tar, crushed slab, and mixtures.....	1929	126	2,876	15	486	2,375	30,303	1,336,764	3,730,867	13,588,502	26,275,369	15,686,867		
Peanuts, walnuts, and other nuts, processed or shelled.....	1929	169	8,546	49	504	7,033	10,193	1,137,678	8,070,740	89,529,488	40,608,894	10,079,408		
	1927	144	7,951	55	520	7,376	13,956	1,063,898	3,287,114	45,890,488	55,949,802	10,050,314		
Pencils, lead (including mechanical).....	1929	38	6,872	6	1,103	5,703	9,921	8,030,360	6,202,276	10,756,296	27,772,955	17,010,659		
	1927	27	6,286	5	880	5,301	9,892	2,950,828	5,942,783	9,931,493	24,499,839	14,508,346		
	1919	12	6,713	—	743	5,970	8,069	1,684,927	5,299,050	9,073,563	24,184,169	15,000,506		
Pens, fountain and stylographic; pen points, gold, steel, and brass.....	1929	76	5,402	37	765	4,600	4,235	1,801,116	5,304,142	11,450,411	34,211,884	22,751,973		
	1927	68	4,838	58	749	4,031	3,721	1,501,232	2,734,501	23,374,789	25,645,189	25,270,400		
	1919	75	5,287	54	803	4,430	1,942	1,920,355	4,177,101	7,172,212	19,477,809	12,306,597		
Perfumes, cosmetics, and other toilet preparations.....	1929	815	19,495	268	6,120	18,109	12,150	16,107,208	13,702,001	58,298,879	193,440,550	135,141,671		
	1927	705	16,250	375	5,412	10,463	10,431	12,593,978	10,665,085	32,765,346	161,245,650	108,480,313		
	1919	569	9,446	373	3,668	5,405	2,196	3,083,011	20,170,026	59,613,391	33,406,365			
Petroleum refining.....	1929	390	94,405	12	13,797	80,506	780,849	33,577,874	131,176,993	2,031,341,408	2,630,665,001	608,323,593		
	1927	354	83,305	12	12,059	71,234	552,651	30,900,277	113,716,705	1,752,997,043	2,142,648,503	389,651,460		
	1919	320	73,473	59	14,525	58,890	238,006	26,619,024	89,749,037	1,247,908,855	1,032,632,766	384,624,411		
Phonographs.....	1929	59	16,698	4	2,278	14,416	38,493	4,447,058	17,825,855	37,323,137	90,849,048	59,525,911		
	1927	60	16,358	14	2,128	14,216	45,607	4,686,643	20,170,203	37,467,711	95,296,187	57,528,426		
	1919	160	18,826	43	5,662	23,721	40,168	8,687,588	33,963,148	60,740,205	158,547,870	98,807,665		
Photo-engraving, not done in printing establishments.....	1929	654	16,851	232	4,266	12,358	9,849	14,576,905	31,831,176	11,003,121	77,382,259	66,370,138		
	1927	611	15,014	288	3,693	11,033	9,806	11,393,351	28,381,480	69,207,376	69,417,248			
	1919	422	9,198	284	2,165	6,789	3,800	4,862,387	10,423,541	5,038,382	29,389,886	24,351,004		
Photographic apparatus and materials.....	1929	115	16,360	58	3,335	12,007	31,001	7,863,176	20,507,499	30,392,531	102,827,886	72,434,855		
	1927	122	15,206	62	3,084	12,120	24,838	6,865,724	18,310,902	29,020,235	90,827,737	61,807,502		
	1910	187	16,393	93	2,835	13,465	24,610	4,578,228	14,900,237	33,806,703	88,393,022	54,586,814		
Pipes (tobacco).....	1929	24	1,948	11	257	1,680	2,276	618,778	1,061,020	1,749,222	5,557,982	3,808,700		
	1927	23	2,034	17	210	1,807	1,928	486,706	2,278,537	2,722,706	7,273,806	4,551,100		
	1910	56	2,902	54	309	2,539	2,001	993,924	2,555,291	8,497,414	11,553,777	8,056,863		
Planing-mill products (including general millwork), not made in planing mills connected with sawmills.....	1929	4,849	109,864	2,793	16,967	90,134	677,908	46,400,495	116,422,004	296,008,499	553,583,498	257,574,099		
	1927	4,561	115,681	2,300	16,732	90,580	630,674	42,460,620	126,180,713	321,633,318	581,633,737	260,100,410		
	1910	5,309	106,481	4,430	15,095	86,956	417,070	28,536,340	91,976,528	209,205,652	500,438,258	201,172,606		
Plated ware.....	1929	96	12,688	30	1,926	10,728	28,899	5,184,039	14,941,552	16,750,985	55,429,059	38,678,074		
	1927	94	13,502	31	1,810	11,752	27,712	4,724,960	10,141,501	20,212,341	56,719,982	36,507,641		
	1910	68	11,459	24	1,943	9,492	14,212	3,430,530	10,913,001	17,766,536	41,634,585	28,868,049		
Plumbers' supplies, not including pipe or vitreous-china sanitary ware.....	1929	255	31,353	50	3,343	27,960	100,821	9,300,680	37,060,907	49,032,599	129,673,784	80,641,185		
	1927	231	33,125	111	3,769	29,245	90,298	9,360,875	40,212,198	56,633,327	146,262,311	89,628,984		
Pocketbooks, purses, and cardcases.....	1929	290	12,052	181	1,441	10,430	1,828	4,651,506	15,229,422	35,351,605	68,627,515	33,275,910		
	1927	257	10,008	205	1,228	8,570	1,725	12,705,599	13,160,509	29,168,524	57,344,055	27,726,131		
	1910	130	3,407	168	424	2,905	431	1,125,264	3,061,903	7,557,155	14,549,059	6,002,604		
Pottery, including porcelain ware.....	1929	313	38,588	95	3,084	35,409	61,868	8,927,286	43,655,980	27,007,384	110,822,453	83,615,089		
	1927	316	39,749	120	2,962	36,667	54,879	8,012,390	45,140,818	33,580,795	110,597,338	77,016,543		
	1919	340	30,692	183	2,575	27,934	29,040	6,003,432	20,290,278	29,040,764	74,910,186	54,125,110		
Poultry killing, dressing, and packing, wholesale.....	1929	485	9,361	207	1,385	7,709	13,500	2,584,570	7,284,558	106,805,506	130,161,230	23,295,724		
Printing and publishing, book and job.....	1929	12,712	204,001	7,859	46,393	150,649	211,448	125,134,513	251,570,602	266,749,365	1,000,656,768	730,907,403		
	1927	11,466	195,828	9,137	44,342	142,347	194,718	111,100,906	241,810,478	253,050,059	920,251,123	667,195,064		
	1910	13,108	171,701	12,196	30,007	123,408	181,544	65,880,364	141,850,722	211,384,064	599,191,610	387,807,546		
Printing and publishing, music.....	1929	124	2,211	31	1,370	810	956	8,839,366	1,314,401	1,542,042	15,240,268	13,698,226		
	1927	119	2,579	67	1,518	994	1,343	8,530,603	1,677,680	1,658,367	15,881,634	14,223,267		
	1910	100	2,622	107	1,616	890	634	3,047,240	920,988	2,123,781	14,592,177	12,468,396		
Printing and publishing, newspaper and periodical.....	1929	11,524	277,072	5,274	142,738	120,660	332,184	318,201,762	253,390,075	391,737,705	1,738,298,892	1,346,561,187		
	1927	10,973	267,770	7,285	181,086	110,399	286,234	270,224,017	231,150,083	409,813,980	1,585,075,512	1,175,201,632		
	1919	17,362	228,630	14,670	93,079	120,381	194,074	143,850,528	144,348,173	300,385,187	924,152,878	623,707,691		
Printing materials, not including type or ink.....	1929	84	1,317	18	295	1,004	2,709	973,720	1,640,276	2,184,644	8,570,006	6		

GENERAL SUMMARY

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TABLE 5.—GENERAL STATISTICS, BY INDUSTRIES, FOR THE UNITED STATES: 1929, 1927, AND 1919—Continued
[See note at head of this table]

INDUSTRY	Cen-	Num-	PERSONS ENGAGED IN THE			Horse-	Salaries ¹	Wages	Cost of	Value of	Value added
			sis-	ber of	estab-	Propri-	Salaried	Wage	materials,	products ²	by manu-
year	lish-	men-	ters and	officers	earners	power			containers for		facture ³
	Total										
Pumps (hand and power) and pumping equipment.	1920	322	30,128	101	6,921	23,106	82,403	\$16,665,750	\$34,920,261	\$66,802,372	\$164,009,397
	1927	278	24,609	129	5,809	18,071	64,763	14,222,792	27,118,924	52,765,023	130,501,191
	1919	239	20,906	114	4,720	16,072	32,441	9,096,225	10,731,647	30,089,781	85,401,940
Rayon and allied products.	1920	29	41,384	—	2,278	30,106	105,844	\$5,765,585	\$44,697,129	\$33,834,753	\$149,546,107
	1927	10	27,606	—	1,355	26,341	122,406	3,093,947	28,640,441	25,747,792	109,888,330
Refrigerators and refrigerator cabinets, exclusive of mechanical refrigerating equipment.	1920	188	11,535	78	1,673	9,784	28,493	\$4,602,178	\$13,181,656	\$20,451,148	\$60,483,314
	1927	165	11,259	74	1,634	9,551	24,216	4,518,892	12,617,121	25,094,718	58,183,054
	1919	122	6,904	72	1,136	5,780	13,029	2,551,322	5,809,351	11,948,972	26,048,808
Refrigerators, mechanical.	1920	34	19,330	4	2,493	16,883	44,953	\$7,024,046	\$26,198,076	\$72,413,047	\$161,565,076
	1927	22	13,371	—	2,080	11,285	32,551	6,106,278	17,712,006	42,051,202	96,513,040
Regalia, badges, and emblems.	1920	77	2,101	43	361	1,757	1,105	902,513	1,824,590	3,227,236	7,927,214
	1927	76	2,191	42	474	1,675	1,016	1,001,950	1,760,438	8,018,948	7,601,253
	1919	115	2,919	90	606	2,223	1,321	951,095	1,800,883	4,287,055	9,395,470
Rice cleaning and polishing.	1920	60	2,141	25	527	1,589	22,901	1,209,394	1,448,594	38,443,520	48,793,777
	1927	60	2,165	19	622	1,524	23,012	1,205,487	1,540,315	46,480,670	54,129,046
	1919	86	3,249	40	1,098	2,113	25,340	1,508,940	1,932,196	76,633,816	90,058,412
Roofing, built-up and roll; asphalt shingles; roof coatings other than paint.	1920	102	7,426	15	1,384	6,027	33,701	3,504,548	8,951,537	61,391,500	103,508,090
	1927	100	9,020	23	1,742	7,255	41,740	4,404,231	10,712,626	67,327,735	123,210,305
	1919	178	11,805	79	2,855	8,871	39,247	5,414,660	10,344,043	52,687,777	85,895,359
Rubber goods other than tires, inner tubes, and boots and shoes.	1920	412	46,565	105	6,234	40,226	295,452	16,509,835	50,278,617	114,074,244	244,745,737
	1927	385	43,009	101	6,015	36,893	270,539	15,047,926	45,030,934	117,770,661	230,781,250
Rubber tires and inner tubes.	1920	91	96,249	5	12,981	83,203	463,257	31,097,602	127,081,975	420,606,971	770,178,890
	1927	109	95,422	4	17,162	78,256	461,724	40,430,162	499,430,162	499,220,642	869,088,063
Saddlery and harness.	1920	260	4,243	216	688	3,330	4,608	1,473,907	3,713,728	13,834,124	23,338,555
	1927	264	5,111	211	877	4,023	4,908	1,659,780	4,541,398	16,526,180	27,358,244
	1919	1,823	14,803	1,046	2,500	10,411	8,205	4,389,085	10,840,066	52,442,907	83,713,010
Safes and vaults.	1920	27	3,789	7	749	3,033	10,806	2,003,041	4,488,698	6,392,461	19,302,102
	1927	26	3,945	9	550	3,330	9,688	1,301,864	4,494,497	7,220,265	18,430,550
Salt.	1929	58	6,216	2	756	5,468	57,711	2,044,073	6,735,484	14,187,797	37,888,697
	1927	58	6,823	8	854	5,961	55,928	2,352,424	7,117,454	14,884,126	34,329,236
	1919	86	7,682	40	1,147	6,495	42,051	2,556,086	7,353,420	10,027,701	37,513,821
Sand-lime brick.	1929	40	707	4	137	566	7,346	370,381	776,202	944,534	2,020,389
	1927	45	941	8	143	790	8,598	373,340	1,051,495	1,157,905	3,616,456
	1919	32	600	3	93	504	4,358	135,773	501,864	875,402	1,087,460
Sandpaper, emery paper, and other abrasive paper and cloth.	1929	11	1,817	1	588	1,228	6,927	1,613,018	1,739,544	8,375,277	17,218,590
	1927	10	1,331	1	413	917	2,834	1,127,893	1,228,420	4,470,620	12,232,064
	1919	12	1,102	3	328	771	3,077	744,282	840,706	5,060,661	8,003,734
Sausage, meat puddings, headcheese, etc., and sausage casings, not made in meat-packing establishments.	1929	681	7,704	678	1,210	5,897	25,755	3,637,162	8,850,172	81,371,687	108,246,104
	1927	505	6,568	493	1,108	4,067	10,980	2,959,017	7,463,677	60,215,600	81,548,290
	1919	633	4,994	704	819	3,471	12,671	1,403,487	4,670,118	49,940,856	50,610,092
Saws.	1929	81	5,117	40	940	4,137	11,894	2,274,313	5,727,416	6,884,331	22,614,958
	1927	77	5,179	45	662	4,182	14,526	2,118,081	5,758,886	7,674,304	22,627,990
	1919	112	6,704	83	1,111	6,510	15,046	2,390,725	6,280,807	11,792,224	31,460,557
Scales and balances.	1929	59	5,214	31	1,065	4,118	9,738	2,849,831	5,095,476	7,438,100	20,943,234
	1927	60	5,020	32	1,082	3,908	8,766	2,430,583	5,600,742	7,455,427	24,655,442
	1919	70	6,821	38	1,351	5,432	7,441	2,265,070	6,533,978	6,993,082	20,641,038
Screw-machine products and wood screws.	1929	273	22,454	106	2,467	19,881	64,840	8,036,349	28,986,604	39,462,568	105,974,682
	1927	218	15,575	82	1,803	13,600	43,468	8,284,021	18,055,096	60,020,223	34,110,038
	1919	154	17,000	71	1,638	15,151	31,281	3,837,889	10,969,393	20,585,431	55,476,042
Sewing machines and attachments.	1929	30	12,189	19	1,703	10,467	20,659	3,010,860	14,076,182	16,458,425	45,004,000
	1927	35	11,776	12	1,767	9,997	31,286	3,692,875	13,748,161	14,072,570	39,728,822
Ship and boat building, steel and wooden, including repair work.	1929	624	61,309	345	5,935	55,080	337,455	15,717,446	88,274,153	85,848,690	231,300,165
	1927	550	60,831	337	5,480	55,014	314,474	14,600,996	87,821,444	78,826,391	211,127,087
	1919	1,075	413,236	816	24,074	387,446	563,271	65,114,494	597,446,648	710,522,670	1,622,361,261
Shirts.	1929	863	63,864	530	3,494	59,830	17,040	8,140,844	43,428,224	110,678,496	228,321,616
	1927	907	62,350	611	4,528	57,216	14,916	9,695,000	42,997,827	129,743,737	241,646,939
	1919	890	45,274	949	4,722	39,603	14,890	9,620,855	25,833,855	127,087,745	205,327,133
Shortenings (not including lard) and vegetable cooking oils.	1929	40	3,487	—	775	2,712	36,647	1,719,996	3,003,946	139,030,964	154,553,197
	1927	33	3,100	4	581	2,655	33,462	1,283,472	2,624,371	137,078,600	148,408,076
Signs and advertising novelties.	1929	1,230	25,716	507	5,119	20,000	19,627	13,126,635	27,900,805	35,701,412	118,044,157
	1927	813	22,071	601	4,568	16,907	15,326	10,411,959	24,044,899	30,892,294	98,481,024
	1919	770	14,832	624	3,776	10,432	7,714	6,681,470	9,715,216	16,071,624	43,343,093
Silk and rayon manufactures.	1929	1,491	139,030	721	7,851	130,467	220,225	23,093,437	137,547,146	412,181,260	731,200,281
	1927	1,648	130,978	920	8,416	127,643	221,249	21,920,553	140,058,588	445,800,676	750,123,705
	1919	1,360	130,775	1,011	8,082	126,782	173,748	26,370,962	108,226,330	388,469,022	698,460,523
Silversmithing and silverware.	1929	88	6,001	47	1,037	5,007	7,325	2,516,311	7,636,413	10,134,708	30,452,360
	1927	84	6,068	72	1,020	4,967	7,499	2,315,082	7,803,183	11,165,068	30,704,218
	1919	99	7,599	68	1,088	6,453	6,843	2,329,514	7,359,409	13,060,920	29,126,133

See footnotes at end of table.

GENERAL STATISTICS BY INDUSTRIES FOR THE UNITED STATES: 1929, 1927, AND 1919—Continued

[See note at head of this table]

INDUSTRY	Cen-sus year	PERSONS ENGAGED IN THE INDUSTRY						Horse-power	Salaries 1	Wages	Cost of materials, containers for products, fuel, and purchased electric energy 2	Value of products 3	Value added by manu-facture 4
		Num-ber of estab-lishments	Total	Propri-ec-tors and firm mem-bers	Salaried officers and em-ployees 1	Wage earners (average for the year)							
Smelting and refining, copper	1929	26	18,537	-----	1,903	14,544	412,244	5,567,743	23,951,055	920,351,441	904,733,862	74,432,421	
	1927	26	15,690	-----	1,766	18,924	323,700	3,943,052	20,581,865	527,763,711	609,200,017	81,535,306	
	1919	34	19,654	-----	2,309	17,345	321,610	5,890,345	25,723,371	584,410,173	651,101,501	60,691,418	
Smelting and refining, lead	1929	19	5,600	-----	871	4,819	59,936	2,206,453	7,577,094	203,913,730	232,115,009	28,201,270	
	1927	18	6,168	-----	770	5,398	48,298	1,715,941	7,689,680	202,850,134	225,137,872	22,278,738	
	1919	25	7,354	1	915	6,438	49,608	2,101,786	9,179,015	179,373,646	190,794,519	17,420,873	
Smelting and refining, metals other than gold, silver, or platinum, not from the ore	1929	106	4,091	36	821	4,134	18,174	3,223,763	5,574,322	83,444,918	105,882,655	22,437,737	
	1927	102	3,517	47	694	2,776	11,989	2,244,024	4,280,201	68,894,494	80,770,646	11,870,052	
	1919	81	2,703	53	573	2,167	7,921	1,571,130	3,003,140	40,675,880	50,240,088	9,570,200	
Smelting and refining, zinc	1929	30	12,701	-----	1,083	11,618	123,901	3,043,505	17,710,270	74,700,088	118,901,070	44,140,982	
	1927	25	12,068	-----	870	11,188	93,007	2,463,481	16,528,204	76,019,331	108,207,975	31,078,614	
	1919	30	14,933	1	1,107	13,766	73,864	2,461,409	17,783,278	76,014,728	104,122,038	34,108,210	
Soap	1929	282	19,137	86	4,688	14,363	65,856	11,503,602	18,994,056	180,352,984	310,191,630	120,838,540	
	1927	256	17,681	90	4,150	13,432	62,025	9,766,393	19,715,931	172,244,130	287,050,035	114,815,805	
	1919	348	28,919	183	8,300	20,436	33,700	14,171,851	21,228,063	238,518,858	316,740,115	78,221,257	
Soda-water apparatus	1929	54	3,024	21	839	2,764	5,271	2,186,822	3,921,538	10,489,871	24,509,783	14,010,912	
	1927	48	3,518	13	607	2,838	5,042	1,677,576	4,222,044	10,390,971	23,929,008	13,538,007	
	1919	66	3,448	43	866	2,599	4,181	1,380,385	3,232,398	6,626,868	15,185,370	8,558,502	
Sporting and athletic goods, not including firearms or ammunition	1929	242	12,739	111	1,835	10,703	18,039	4,520,710	13,135,484	24,482,236	58,288,728	33,800,402	
	1927	188	11,332	90	1,553	9,689	13,484	3,516,550	11,505,480	19,393,661	44,942,778	25,549,117	
	1919	188	7,490	143	935	6,412	6,780	1,605,097	5,752,968	11,900,388	23,839,991	11,870,003	
Springs, steel, except wire, not made in plants operated in connection with rolling mills	1929	86	6,675	12	821	5,812	24,318	2,654,594	8,818,927	25,372,478	40,672,819	21,200,841	
	1927	94	6,711	20	988	6,753	22,263	2,903,528	9,912,961	24,598,508	43,820,633	10,222,005	
	1919	112	10,401	55	1,365	8,981	16,500	3,544,680	11,157,874	28,019,180	51,470,535	23,400,355	
Stamped ware, enameled ware, and metal stamping, enameling, Japanese, and lacquering	1929	582	46,052	104	5,888	40,000	98,184	17,625,920	50,001,700	87,639,405	204,306,134	116,644,630	
	1927	476	35,615	200	4,562	30,853	73,619	12,094,326	35,172,048	63,880,269	150,936,063	82,955,744	
	1919	433	40,700	218	5,245	35,237	52,707	10,501,932	35,902,259	62,238,109	147,069,783	80,441,674	
Stationery goods, not elsewhere classified	1929	203	13,428	63	2,287	11,078	11,523	6,229,513	12,420,726	32,177,887	74,002,047	41,884,100	
	1927	194	11,090	65	2,044	8,987	8,891	4,453,213	9,791,788	27,016,348	56,987,490	20,971,192	
	1919	223	14,535	130	3,144	11,261	8,342	6,582,175	9,577,807	28,100,239	58,363,244	30,203,005	
Statuary and art goods, factory product	1929	171	2,681	176	303	2,112	1,539	1,196,213	4,235,907	2,044,955	10,045,169	8,000,204	
	1927	136	2,470	124	318	2,028	1,137	1,130,189	4,403,742	2,414,919	10,187,247	7,772,328	
	1919	195	1,906	233	207	1,466	682	354,837	1,716,067	1,378,540	5,010,521	3,010,081	
Steam and other packing, pipe and boiler covering, and gaskets, not elsewhere classified	1929	171	8,713	55	1,302	7,206	30,881	4,132,547	9,600,414	21,596,489	45,433,135	23,830,040	
	1927	159	7,568	89	1,533	5,946	29,810	4,237,064	7,904,603	19,704,205	43,441,501	23,250,206	
	1919	169	7,761	72	1,542	6,147	26,755	3,262,877	7,103,275	22,724,561	40,924,779	17,800,218	
Steam fittings and steam and hot-water heating apparatus	1929	240	45,945	25	6,299	39,621	137,330	16,527,334	58,974,874	72,708,268	228,310,254	155,601,038	
	1927	232	49,590	38	6,668	42,803	132,723	17,012,494	64,851,149	76,835,207	225,158,390	148,323,123	
	1919	261	43,864	73	7,105	30,686	67,404	12,401,708	45,742,525	72,016,393	160,285,488	88,260,095	
Steel barrels, kegs, and drums	1929	53	4,674	8	550	4,110	15,289	1,806,232	5,749,007	21,946,559	37,825,027	15,878,408	
	1927	39	3,353	9	491	2,853	11,229	1,404,524	3,185,629	14,735,518	24,104,669	9,369,151	
	1919	33	3,967	11	634	3,322	10,554	1,463,977	4,455,444	15,181,210	24,042,650	9,791,410	
Stereotyping and electrotyping, not done in printing establishments	1929	230	7,941	68	1,386	6,487	21,347	4,852,832	13,700,676	6,540,881	35,617,297	29,070,416	
	1927	187	5,722	80	1,140	4,502	16,888	3,420,110	10,272,775	4,676,853	25,549,214	20,872,301	
	1919	171	4,623	85	874	3,664	0,498	2,029,906	5,002,545	4,234,470	15,018,014	11,684,535	
Stoves and ranges (other than electric) and warm-air furnaces	1929	809	54,813	106	8,031	40,616	113,100	21,046,123	65,146,509	100,747,049	271,747,009	170,990,980	
	1927	564	53,459	171	8,108	45,180	103,009	21,131,508	64,327,405	93,095,971	258,285,829	165,189,858	
	1919	588	51,931	238	8,260	45,433	86,698	17,597,247	53,890,903	79,275,280	201,609,092	122,234,704	
Structural and ornamental iron and steel work, not made in plants operated in connection with rolling mills	1929	1,482	69,337	732	13,658	54,047	206,175	39,081,510	87,785,606	244,606,254	477,036,827	232,340,573	
	1927	1,284	65,902	778	12,732	52,392	251,070	35,659,878	84,578,043	243,446,072	440,376,300	196,030,288	
	1919	1,146	60,205	721	11,522	43,962	165,179	23,110,282	59,920,132	168,800,715	204,962,419	120,161,704	
Sugar, beet	1929	82	8,943	-----	1,447	7,496	146,393	2,798,026	10,020,743	70,900,908	108,562,581	37,601,073	
	1927	79	8,872	-----	1,470	7,402	142,023	3,014,775	9,709,969	70,016,770	104,920,584	25,000,814	
	1919	85	14,190	1	2,403	11,781	127,394	4,427,956	15,908,118	87,029,144	140,155,892	62,126,748	
Sugar, cane, not including products of refineries	1929	70	2,745	22	404	2,310	66,779	459,518	1,642,463	12,222,558	18,325,702	6,103,234	
	1927	53	1,225	23	233	971	45,705	12,202,710	630,139	5,830,411	8,000,120	2,178,700	
	1919	202	7,045	165	779	6,101	101,859	1,065,448	4,000,369	44,143,410	57,741,320	13,607,904	
Sugar refining, cane	1929	21	15,659	4	1,743	13,912	98,637	4,559,528	17,850,493	438,399,151	507,889,202	68,900,111	
	1927	21	15,742	-----	1,746	13,906	98,979	4,645,827	17,707,257	551,504,278	597,445,632	45,851,364	
	1919	20	20,921	6	2,713	18,202	52,641	5,442,187	22,710,404	662,143,981	730,986,700	68,842,725	
Surgical and orthopedic appliances, including artificial limbs	1929	363	10,372	214	2,248	7,010	13,407	5,722,067	8,921,668	36,004,844	71,607,110	35,602,275	
	1927	336	9,648	216	2,017	7,310	9,662	4,540,770	8,371,278	30,763,598	60,623,497	25,850,809	
	1919	446	10,073	273	2,630	7,001	13,239	4,637,980	6,878,668	22,988,668	46,805,266	23,817,108	
Suspenders, garters, and other elastic woven goods, made from purchased webbing	1929	61	4,955	75	539	4,341	1,180	1,439,296	3,971,030	17,905,748	30,478,180	12,567,421	
	1927	61	4,915	88	766	4,061	983	2,207,076	3,529,147	16,250,683	26,985,376	10,725,093	
Tanning materials, natural dyestuffs, mordants and assistants, and sizes	1929	126	3,162	34	709	2,410	22,575	2,805,779	8,113,617	25,335,829	39,836,035	14,500,406	
	1927	122	3,249	28	807	2,414	20,172	2,517,600	9,271,477	23,075,926	35,677,033	12,603,108	
	1919	144	5,205	59	804	4,842	34,295	2,320,914	4,734,614	34,592,698	53,744,283	19,161,585	

See footnotes at end of table

GENERAL SUMMARY

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TABLE 5.—GENERAL STATISTICS, BY INDUSTRIES, FOR THE UNITED STATES: 1929, 1927, AND 1919—Continued

[See note at head of this table]

INDUSTRY	Cen-sus-year	Num-ber-of-es-tab-lish-ments	PERSONS ENGAGED IN THE INDUSTRY				Horse-power	Salaries ¹	Wages	Cost of materials, containers for products, fuel, and purchased electric energy ²	Value of products ³	Value added by manu-fac-ture ³
			Total	Propri-ec-tors and firm mem bers	Salaried officers and em-ployees ¹	Wage earners (average for the year)						
Textile machinery and parts	1929	376	31,494	231	4,244	27,019	66,520	12,660,745	Dollars	36,556,299	Dollars	Dollars
	1927	367	30,438	218	4,066	26,154	64,532	10,917,207		37,836,406	122,428,514	85,882,215
	1919	432	30,126	354	3,049	31,823	41,744	8,098,770		36,180,680	116,921,130	80,740,441
Theatrical scenery and stage equipment	1929	55	757	30	180	547	618	727,710	Dollars	992,133	2,098,498	5,507,827
	1927	39	752	26	165	561	998	533,817		1,379,971	2,330,377	3,415,095
	1919	17	230	6	75	149	104	138,021		237,803	504,655	1,067,333
Tin and other foils, not including gold foil	1929	7	1,998	—	288	1,710	18,642	1,177,614	Dollars	13,548,399	20,964,849	7,406,450
	1927	10	1,879	—	221	1,068	18,770	580,716		1,856,371	16,350,016	20,951,679
Tin cans and other tinware, not elsewhere classified	1929	232	85,312	55	3,757	81,497	77,332	8,288,015	Dollars	38,173,240	194,086,803	256,001,426
	1927	236	33,118	62	3,385	29,721	64,006	7,390,133		35,000,822	160,421,340	253,478,691
	1919	301	38,958	177	4,395	34,386	30,234	8,209,888		34,403,300	165,170,730	233,964,000
Tobacco: Chewing and smoking, and snuff	1929	152	11,981	117	1,053	10,811	15,467	3,281,688	Dollars	8,055,451	72,494,329	179,332,951
	1927	159	14,548	109	1,314	13,126	16,566	3,520,768		10,661,420	85,310,438	198,244,877
	1919	365	22,468	325	3,819	18,893	18,893	6,918,491		12,074,730	130,270,398	109,000,330
Tools, not including edge tools, machine tools, files, or saws	1929	534	23,102	279	3,518	19,305	65,965	9,744,389	Dollars	25,808,289	32,110,507	99,402,032
	1927	405	19,504	227	2,830	16,447	67,024	6,842,965		20,041,445	28,057,884	78,007,237
	1927	657	30,246	370	4,644	25,232	85,963	11,641,300		34,494,964	37,055,034	117,430,624
	1919	1,125	44,142	856	7,701	35,585	67,730	12,608,706		43,836,069	45,708,067	144,201,608
Toys (not including children's wheel goods or sleds), games, and playground equipment	1929	476	19,433	283	2,490	16,600	25,042	6,775,783	Dollars	17,600,073	29,981,527	74,828,981
	1927	397	17,020	222	2,060	14,738	19,028	5,307,402		15,543,383	25,805,418	38,70,288
	1919	541	16,483	409	1,813	14,201	14,423	3,562,480		11,847,277	10,841,493	45,056,803
Trimmings (not made in textile mills) and stamped art goods for embroidery	1929	630	9,826	406	1,426	7,934	3,068	3,786,252	Dollars	9,761,881	20,783,226	45,179,933
Trunks, suitcases, and bags	1929	467	13,383	314	1,710	11,359	10,220	4,925,638	Dollars	13,756,761	31,693,935	63,968,929
	1927	495	12,512	416	1,752	10,345	9,001	4,606,702		13,084,687	20,128,235	50,955,681
	1919	597	14,216	601	2,145	11,470	7,696	5,271,777		12,463,707	33,222,432	63,932,266
Turpentine and rosin	1929	1,183	43,224	1,484	1,583	40,157	1,905	1,941,210	Dollars	15,036,175	10,293,954	36,281,032
	1927	1,149	40,876	843	2,120	37,913	3,211	2,615,681		12,173,394	39,902,971	27,722,577
	1919	1,191	31,063	1,460	1,566	28,007	2,276	2,242,856		16,972,881	13,920,388	53,051,294
Type founding	1929	19	540	12	61	407	1,218	160,562	Dollars	556,051	648,114	2,603,610
	1927	10	611	11	75	525	1,230	180,420		658,381	749,035	2,683,701
	1919	23	870	11	49	810	845	77,151		867,517	943,245	2,089,757
Typewriters and parts	1929	26	18,410	1	1,464	10,945	23,388	3,336,503	Dollars	22,319,327	7,248,601	61,857,615
	1927	26	17,224	2	1,010	16,603	14,053	2,039,184		10,397,911	9,030,070	55,318,804
Umbrellas, parasols, and canes	1929	141	3,461	127	479	2,855	3,000	1,191,701	Dollars	2,708,410	10,907,378	17,904,376
	1927	184	4,086	164	614	3,308	2,411	1,305,419		3,411,261	14,020,984	23,166,400
	1919	198	4,173	232	573	3,308	3,357	1,635,828		3,130,002	15,632,880	25,308,826
Upholstering materials, not elsewhere classified	1929	53	1,624	31	183	1,410	3,915	612,780	Dollars	1,317,371	7,046,334	11,234,192
	1927	30	1,273	22	171	1,080	4,482	541,076		1,162,450	6,555,109	9,672,806
	1919	51	1,778	41	180	1,557	4,338	400,100		1,379,633	4,704,722	8,694,295
Vinegar and cider	1929	172	1,307	105	283	970	8,674	820,942	Dollars	1,021,581	0,016,020	10,450,332
	1927	158	1,550	112	315	1,123	7,562	685,626		1,255,996	5,855,241	10,755,246
	1919	720	3,333	724	628	1,981	17,943	1,168,017		2,047,409	15,555,625	24,722,610
Wall paper	1929	56	5,421	1	715	4,705	12,740	2,550,885	Dollars	5,731,932	13,480,205	30,007,949
	1927	53	5,638	1	826	4,811	13,343	2,287,981		5,081,451	14,012,415	30,050,153
	1919	48	5,098	3	833	4,262	8,123	1,767,335		3,882,390	13,152,503	23,047,901
Wall plaster, wall board, insulating board, and floor composition	1929	230	8,904	43	1,489	7,462	142,354	3,040,261	Dollars	10,180,301	28,312,028	70,662,748
	1927	221	11,899	36	1,849	10,014	116,230	4,423,677		14,411,777	31,908,885	83,850,008
Washing machines, wringers, driers, and ironing machines, for household use	1929	65	9,911	9	1,713	8,180	20,732	4,722,829	Dollars	12,071,010	40,707,373	82,320,924
	1927	75	9,453	29	1,635	7,789	20,997	3,756,639		10,950,046	34,525,335	70,244,407
	1919	105	7,556	40	1,559	5,956	8,810	2,752,083		6,431,378	23,385,925	40,771,285
Waste	1929	136	4,581	70	597	3,905	18,502	2,084,732	Dollars	3,816,344	25,633,015	36,013,705
	1927	118	4,077	86	497	3,494	14,520	1,509,340		2,852,971	23,040,983	33,377,276
	1919	98	3,831	65	456	2,810	11,837	1,279,684		2,224,872	22,719,612	30,683,825
Watch and clock materials and parts, except watchcases	1929	17	361	11	39	311	197	02,276	Dollars	287,079	266,984	930,837
	1927	17	495	12	68	415	210	110,423		407,345	315,486	1,300,803
	1919	27	678	24	72	582	262	115,001		412,820	549,521	1,341,997
Watchcases	1929	40	3,944	23	517	3,404	5,581	1,325,806	Dollars	4,026,111	4,631,225	13,401,045
	1927	40	3,006	22	584	3,360	4,121	1,472,544		4,326,303	5,810,074	13,724,703
	1919	33	4,587	15	672	3,900	4,275	1,316,735		4,000,727	8,205,754	19,618,773
Watches and watch movements	1929	8	11,635	—	897	10,738	10,146	1,752,497	Dollars	12,081,115	10,455,921	34,370,399
	1927	11	12,985	3	790	12,192	9,357	1,510,970		15,090,220	5,871,384	32,278,362
	1919	18	10,852	3	961	15,888	7,202	1,697,030		16,598,896	6,392,692	32,044,299
Whips	1929	8	70	6	7	57	82	7,520	Dollars	47,714	80,308	224,219
	1927	7	104	8	8	90	252	9,821		89,305	175,756	134,547
	1919	26	912	26	109	717	853	431,518		582,230	1,096,642	2,986,285
Windmills and windmill towers	1929	15	1,845	3	288	1,554	4,491	834,349	Dollars	2,144,582	3,571,539	8,640,205
	1927	16	1,641	5	281	1,355	3,608	689,842		1,881,520	3,233,593	7,514,149
	1919	31	2,383	10	441	1,932	4,686	794,380		2,145,301	4,960,420	9,932,685

See footnotes at end of table.

CENSUS OF MANUFACTURES: 1929

TABLE 5.—GENERAL STATISTICS, BY INDUSTRIES, FOR THE UNITED STATES: 1929, 1927, AND 1919—Continued

(See note at head of this table)

INDUSTRY	Cen-	Num-	PERSONS ENGAGED IN THE				Horse-	Salaries ¹	Wages	Cost of	Value of	Value added
			sus-	ber of	estab-	lish-ments						
			Total	Propri- etors	Salaried officers	Wage earners (average for the year)	Horse- power	Salaries ¹	Wages	Cost of	Value of	Value added
				firm mem- bers	and em- ployees ¹					materials, containers for products, fuel, and purchased electric energy ²	products ²	by man- u- facture ³
Window and door screens and weather strip.	1929	280	5,055	192	820	4,084	14,034	Dollars	Dollars	Dollars	Dollars	Dollars
	1927	214	4,573	134	778	3,661	11,520	2,416,318	4,937,661	10,512,746	24,451,700	13,938,954
	1919	214	2,782	197	406	2,170	7,515	1,994,342	4,805,657	9,303,982	22,645,361	13,339,379
								825,808	2,040,768	4,897,380	10,932,867	6,035,468
Window shades and fixtures	1929	482	5,981	205	978	4,708	8,380	2,404,744	5,623,588	19,783,350	36,964,894	17,179,344
	1927	380	6,075	358	984	4,733	8,679	2,380,879	5,865,781	21,065,474	37,081,937	16,016,468
	1919	287	5,494	258	825	4,411	8,946	1,773,867	3,069,286	18,249,540	20,190,649	10,941,109
Wire, drawn from purchased bars or rods.	1929	81	25,024	3	2,554	22,467	150,620	6,979,078	35,110,335	126,182,429	213,997,410	87,814,081
	1927	73	22,222	9	2,347	19,806	152,574	6,201,089	30,038,209	128,002,414	109,709,790	62,617,876
	1919	66	22,236	13	2,482	19,741	110,301	5,454,406	29,289,667	102,813,591	102,151,236	59,337,645
Wirework, not elsewhere classified	1929	547	25,903	204	3,221	2,388	48,864	9,588,683	27,912,231	68,144,047	146,805,049	78,661,002
	1927	512	25,448	274	3,477	21,697	45,858	9,436,300	26,439,144	63,093,221	128,535,783	65,442,502
	1919	558	18,340	457	2,669	15,224	29,036	6,078,557	15,505,992	50,754,070	90,549,245	30,705,175
Wood distillation and charcoal manufacture.	1929	91	5,223	9	560	4,648	25,500	1,479,926	5,203,240	14,701,111	29,593,672	14,802,561
	1927	88	5,115	13	565	4,537	16,833	1,421,379	4,739,153	15,422,575	27,630,487	12,207,912
	1919	166	5,907	58	994	5,155	15,320	1,360,475	5,465,761	20,319,973	33,134,732	12,814,769
Wood preserving	1929	199	14,497	7	1,413	13,077	57,913	3,621,564	14,039,073	147,702,724	190,944,045	43,241,921
	1927	103	13,725	5	1,461	12,269	50,606	3,200,771	13,725,557	141,554,808	184,557,640	43,002,742
	1919	73	4,615	1	636	3,978	16,104	1,293,230	4,342,277	23,241,858	33,239,313	9,997,455
Wood turned and shaped and other wooden goods, not elsewhere classified.	1929	804	21,499	587	2,200	18,712	88,398	5,566,604	18,616,688	28,428,563	60,619,990	41,191,427
	1927	748	18,209	443	1,829	15,087	77,425	4,370,124	16,323,285	26,063,907	60,530,005	34,466,098
	1919	967	19,910	885	1,933	17,002	65,696	3,403,734	14,968,916	26,782,568	60,640,400	20,857,832
Woolen goods	1929	400	62,645	115	4,056	58,474	195,247	13,815,454	60,013,590	165,882,063	200,938,949	125,050,880
	1927	471	65,509	149	3,870	61,790	191,703	12,059,574	72,166,153	172,700,233	301,308,743	128,608,510
	1919	500	67,020	258	3,805	62,957	172,101	13,141,098	60,505,826	217,965,333	384,890,590	146,931,257
Wool pulling	1929	18	675	7	72	596	1,847	251,871	907,278	10,016,994	13,648,084	2,731,070
	1927	18	608	14	70	524	2,403	191,328	768,990	12,466,056	14,640,401	2,174,345
	1919	24	839	23	111	705	2,162	283,208	908,788	12,800,692	17,361,231	4,551,039
Wool scouring	1929	21	1,496	2	192	1,302	8,241	624,397	1,770,974	8,021,731	6,241,284	3,219,588
	1927	25	1,681	7	188	1,386	7,935	491,440	1,951,774	8,000,956	6,601,994	3,052,038
	1919	33	2,407	9	221	2,177	9,710	727,174	2,806,453	7,228,350	13,679,584	0,451,234
Wool shoddy	1929	50	2,057	17	278	1,762	15,040	1,017,154	2,109,374	10,129,717	15,344,978	5,218,261
	1927	55	1,950	35	236	1,679	15,363	819,350	1,016,195	7,980,875	12,506,720	4,815,851
	1919	78	2,956	64	326	2,500	10,567	1,017,223	2,653,109	10,076,315	23,264,398	7,178,083
Worsted goods	1929	264	98,763	53	5,225	88,485	372,530	16,322,207	98,137,732	336,649,459	530,067,399	190,417,940
	1927	288	97,456	62	4,823	92,571	364,422	15,894,253	101,665,747	329,407,609	516,689,566	187,281,947
	1919	292	109,372	120	5,413	103,830	294,028	17,840,680	101,512,865	447,620,350	700,537,482	252,908,132
Wrought pipe, welded and heavy riveted, not made in plants operated in connection with rolling mills.	1929	50	12,839	3	1,419	11,417	68,630	4,395,003	18,702,303	70,120,941	124,658,966	54,533,025
	1927	44	12,200	6	1,111	11,083	53,938	3,514,435	16,066,001	55,778,864	98,186,341	42,407,477
	1919	50	11,783	13	1,344	10,426	23,925	2,854,026	14,910,676	51,155,653	81,869,115	30,713,462

¹ Data for employees of central-administrative offices included in the figures for 1919 but not in those for 1927 or 1929. The number of such employees, as reported for 1929, was 203,363, and their compensation amounted to \$600,437,331. The corresponding data for 1919 can not be segregated, and no such data were collected for 1927.² The aggregates for cost of materials and value of products include large but indeterminable amounts of duplication due to the use of the products of some establishments as materials by others. This duplication occurs, as a rule, between different industries, and is not found to any great extent in individual industries.³ Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.⁴ No comparable data available for 1919.⁵ Because of changes in classification, the figures for 1919 are not strictly comparable with those for later years.⁶ Adjusted for comparison with 1920.⁷ No comparable data available for 1927 or 1919.⁸ New industry classification at the census for 1929.

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TABLE 6.—RELATIVE IMPORTANCE OF LEADING INDUSTRIES, FOR THE UNITED STATES: 1929

INDUSTRY	Number of establish- ments	WAGE EARNERS		COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY		VALUE OF PRODUCTS		VALUE ADDED BY MANUFACTURE	
		Average for the year	Rank	Amount	Rank	Amount	Rank	Amount	Rank
		97,228	4,725,511	\$17,491,269,712		\$39,596,430,225		\$16,105,160,513	
Industries reporting 100,000 wage earners or more, total.									
Foundry and machine-shop products, not elsewhere classified.	8,605	454,441	1	1,038,066,092	5	2,791,401,064	4	1,763,395,872	1
Cotton goods.	1,281	424,916	2	898,028,977	9	1,624,177,087	11	626,148,110	13
Lumber and timber products, not elsewhere classified.	12,015	419,084	3	419,003,388	25	1,273,472,320	12	853,868,932	6
Iron and steel: Steel works and rolling mills.	488	394,574	4	1,904,083,157	4	3,365,788,805	3	1,461,705,048	2
Car and general construction and repairs, steam-railroad repair shops.	1,851	368,681	5	516,502,452	17	1,184,435,262	13	668,872,810	12
Electrical machinery, apparatus, and supplies.	1,802	328,722	6	971,017,023	6	2,800,915,572	6	1,329,897,949	4
Motor vehicles, not including motorcycles.	244	226,110	7	2,401,511,763	2	8,722,793,274	1	1,321,281,511	5
Motor-vehicle bodies and motor-vehicle parts.	1,154	221,332	8	856,956,637	11	1,537,920,703	9	680,944,166	11
Kutl goods.	1,888	208,488	9	456,700,958	20	899,710,672	23	443,016,714	19
Boots and shoes, other than rubber.	1,341	205,640	10	515,055,246	18	905,022,694	19	450,867,443	18
Bread and other bakery products.	20,785	200,841	11	737,000,500	12	1,526,110,811	10	789,011,311	7
Furniture, including store and office fixtures.	3,778	193,399	12	426,454,169	24	948,110,358	20	521,062,180	15
Clothing, women's, not elsewhere classified.	8,082	187,600	13	934,418,088	7	1,709,580,505	8	775,160,822	8
Printing and publishing, book and job.	12,712	150,049	14	268,749,395	37	1,006,056,708	16	739,007,403	9
Clothing (except work clothing), men's, youths', and boys', not elsewhere classified.	3,691	149,808	15	440,504,970	21	901,104,206	22	460,599,226	16
Silk and rayon manufactures.	1,491	130,467	16	412,181,260	28	731,200,231	29	319,018,971	24
Printing and publishing, newspaper and periodical.	11,524	129,660	17	301,737,705	27	1,738,298,802	7	1,346,561,187	3
Meat packing, wholesale.	1,277	122,505	18	2,974,127,757	1	3,434,654,008	2	460,826,341	17
Cigars and cigarettes.	1,630	105,308	19	356,778,028	29	1,060,908,888	14	710,180,805	10
Paper.	655	103,320	20	574,607,978	16	607,186,026	18	302,578,048	20
Industries reporting 50,000 to 100,000 wage earners, total.									
Canning and preserving: Fruits and vegetables; pickles, jellies, preserves, and saucers.	2,997	98,866	21	462,062,128	19	750,342,041	28	288,279,913	26
Clay products (other than pottery) and nonclay refractories.	1,740	98,336	22	81,608,742	84	204,934,513	50	213,235,771	33
Planing-mill products (including general millwork), not made in planing mills connected with sawmills.	4,849	90,134	23	296,008,499	35	553,583,498	31	267,574,099	27
Worsted goods.	264	88,485	24	334,049,469	31	636,067,399	32	199,417,940	35
Rubber tires and inner tubes.	91	83,283	25	429,604,971	23	770,170,890	25	340,509,919	22
Petroleum refining.	390	80,596	26	2,031,341,408	3	2,639,665,001	5	608,323,593	14
Dyeing and finishing textiles.	732	76,327	27	235,712,166	40	465,820,020	37	230,108,473	31
Nonferrous-metal alloys and products, not including aluminum products.	1,225	70,183	28	600,410,018	15	900,804,050	21	309,393,137	25
Glass.	263	67,627	29	103,203,943	66	303,818,560	47	200,524,017	34
Confectionery.	2,021	63,501	30	215,192,474	42	303,200,849	42	178,077,375	38
Chemicals, not elsewhere classified.	551	62,199	31	363,576,811	28	738,048,386	28	374,471,575	21
Engines, turbines, tractors, and water wheels.	199	61,148	32	202,000,430	44	457,217,600	38	254,317,230	28
Shirts.	863	59,830	33	116,078,496	59	228,321,616	66	111,043,120	61
Woolen goods.	460	55,474	34	165,882,083	49	200,938,949	52	125,056,886	57
Boxes, paper, not elsewhere classified.	1,249	55,654	35	160,830,877	51	294,263,206	51	134,413,710	54
Ship and boat building, steel and wooden, including repair work.	624	55,089	36	85,848,690	80	231,300,165	63	145,451,475	49
Structural and ornamental iron and steel work, not made in plants operated in connection with rolling mills.	1,482	54,947	37	244,000,254	39	477,030,827	36	232,340,573	30
Hardware not elsewhere classified.	485	52,306	38	76,480,210	89	229,477,507	64	152,997,297	47
Industries reporting 25,000 to 50,000 wage earners, total.									
Leather: Tanned, curried, and finished.	471	49,932	39	337,507,968	30	481,340,209	35	143,742,431	50
Machine tools.	280	47,391	40	64,284,622	100	244,578,088	50	180,204,086	37
Stoves and ranges (other than electric and warm-air furnaces).	609	46,616	41	100,747,049	70	271,747,009	55	170,960,000	42
Gas, manufactured, illuminating and heating.	754	43,065	42	188,416,183	46	612,662,596	33	324,236,412	23
Agricultural implements.	203	41,663	43	113,009,484	61	277,864,402	53	163,884,978	44
Rubber goods other than tires, inner tubes, and boots and shoes.	412	40,226	44	114,674,244	60	244,745,737	58	130,071,493	55
Turpentine and rosin.	1,183	40,157	45	10,203,054	232	30,281,032	194	25,987,678	161
Cars, electric and steam railroad, not built in railroad repair shops.	147	40,015	46	223,880,397	41	328,220,204	44	104,330,807	65
Stamped ware, enameled ware, and metal stamping, enameling, japaning, and lacquering.	582	40,000	47	87,039,495	78	204,306,134	71	110,666,639	59
Steam fitting and steam and hot-water heating apparatus.	240	39,021	48	72,708,268	92	228,310,264	66	165,601,980	46
Rayon and allied products.	20	39,106	49	33,334,753	140	149,546,107	91	116,211,354	60
Clothing, work (including sheep-lined and blanket-lined work coats but not including shirts), men's.	511	38,201	50	88,551,715	82	138,460,078	95	54,898,363	110
Marble, granite, slate, and other stone products.	1,881	37,817	51	57,037,598	100	192,168,916	74	134,528,078	53
Pottery, including porcelain ware.	313	35,409	52	27,007,364	159	110,622,463	112	83,015,089	80
Cement.	174	33,368	53	95,242,497	74	267,509,280	57	172,266,763	40
Carpets and rugs, wool, other than rag.	67	32,623	54	80,650,892	79	176,915,304	80	90,264,472	73
Millinery.	1,293	32,206	55	98,089,659	72	195,693,457	72	97,603,798	69
Ice, manufactured.	4,110	32,184	56	89,808,164	119	210,952,264	69	171,144,100	41
Tin cans and other tinware, not elsewhere classified.	232	31,497	57	194,980,803	45	296,901,426	49	101,914,023	66
Boxes, wooden, except cigar boxes.	792	30,654	58	74,031,937	91	135,025,675	96	60,943,738	105
Car and general construction and repairs, electric-railroad repair shops.	446	29,475	59	32,781,113	141	85,481,577	130	52,700,404	113
Paints and varnishes.	1,063	29,211	60	334,132,065	32	568,975,888	30	234,843,773	29
Copper, tin, and sheet-iron work, including galvanized-iron work, not elsewhere classified.	2,161	28,593	61	112,048,112	62	222,484,025	67	109,836,513	63
Beverages.	5,134	28,281	62	103,026,180	67	270,323,803	56	167,297,623	43
Plumbers' supplies, not including pipe or vitreous-china sanitary ware.	255	27,960	63	40,032,599	112	120,673,784	99	80,641,185	85
Jewelry.	1,536	27,922	64	78,804,617	86	177,386,932	79	97,582,318	70
Flour and other grain-mill products.	4,022	27,028	65	865,872,589	10	1,060,269,418	15	101,896,849	36
Textile machinery and parts.	376	27,019	66	36,566,299	129	122,438,514	105	85,882,215	78
Machine-tool accessories and small metal-working tools, not elsewhere classified.	722	26,682	67	26,992,031	160	144,410,800	94	117,418,259	58
Furnishing goods, men's, not elsewhere classified.	598	26,588	68	83,631,818	81	150,983,603	90	67,831,785	98
Boots and shoes, rubber.	22	26,659	69	34,306,466	136	102,537,625	121	68,141,166	96

CENSUS OF MANUFACTURES: 1929

TABLE 6.—RELATIVE IMPORTANCE OF LEADING INDUSTRIES, FOR THE UNITED STATES: 1929—Continued

INDUSTRY	Number of estab- lish- ments	WAGE EARNERS		COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY		VALUE OF PRODUCTS		VALUE ADDED BY MANUFACTURE	
		Average for the year	Rank	Amount	Rank	Amount	Rank	Amount	Rank
				\$7,089,748,085		\$11,380,303,568		\$4,790,554,883	
Industries reporting 10,000 to 25,000 wage earners, total.									
Iron and steel: Blast furnaces.....	106	24,960	70	610,293,771	14	771,425,464	24	161,131,773	45
Bookbinding and blank-book making.....	1,108	24,754	71	30,754,771	148	102,783,026	120	72,028,628	94
Pulp (wood and other fiber).....	198	24,729	72	148,752,729	54	238,928,279	60	90,175,550	74
Gas and electric fixtures; lamps, lanterns, and reflectors.....	614	23,580	73	57,915,407	105	144,965,706	93	87,047,299	77
Pumps (hand and power) and pumping equipment.....	322	23,106	74	66,802,372	99	164,009,397	85	97,207,025	71
Wire, drawn from purchased bars or rods.....	81	22,487	75	126,182,420	58	213,097,410	68	87,814,981	76
Ice cream.....	3,150	22,399	76	155,904,386	53	328,413,911	43	172,440,526	39
Wirework, not elsewhere classified.....	547	22,388	77	63,144,047	98	140,805,049	92	78,461,002	86
Aluminum manufactures.....	160	21,210	78	94,036,463	76	153,457,248	80	59,420,755	107
Fertilizers.....	638	20,926	79	150,801,195	52	232,510,936	61	72,709,741	92
Forgings, iron and steel, not made in plants operated in connection with rolling mills.....	218	20,882	80	71,806,904	95	158,248,947	87	84,641,083	79
Coke, not including gas-house coke.....	163	20,552	81	251,592,430	36	416,348,458	40	134,750,028	52
Paper goods, not elsewhere classified.....	436	20,227	82	100,385,078	71	182,047,712	77	82,279,036	82
Signs and advertising novelties.....	1,239	20,000	83	55,701,412	132	118,044,157	110	82,342,745	81
Screw-machine products and wood screws.....	273	19,881	84	39,462,568	122	105,974,062	116	66,512,004	99
Cast-iron pipe.....	72	19,741	85	34,289,365	137	80,260,550	135	45,971,185	119
Tools, not including edge tools, machine tools, files, or saws.....	534	19,305	86	32,110,507	143	99,462,032	124	67,381,525	97
Butter.....	3,527	19,007	87	635,873,586	13	746,417,820	27	110,644,034	62
Lithographing.....	376	18,979	88	38,992,142	124	121,014,821	108	82,022,170	83
Fancy and miscellaneous articles, not elsewhere classified.....	814	18,722	89	35,130,854	134	85,388,961	131	50,240,107	115
Wood turned and shaped and other wooden goods, not elsewhere classified.....	894	18,712	90	28,428,563	153	69,619,990	148	41,191,427	130
Mattresses and bed springs, not elsewhere classified.....	951	17,187	91	61,527,026	102	123,279,717	104	61,752,691	102
Typewriters and parts.....	26	16,945	92	7,248,601	248	61,857,615	154	54,600,014	111
Refrigerators, mechanical.....	34	16,883	93	72,413,047	94	161,665,076	86	89,152,629	75
Instruments, professional and scientific.....	276	16,876	94	28,411,430	154	89,748,369	128	61,334,989	104
Cash registers and adding, calculating, and card-tabulating machines.....	46	16,840	95	10,760,013	225	110,000,986	118	99,234,973	68
Toys (not including children's wheel goods or sleds), games, and playground equipment.....	476	16,060	96	29,981,527	151	74,828,981	139	44,847,454	121
Hats, fur-felt.....	159	16,539	97	55,208,045	108	102,004,165	123	46,706,120	118
Concrete products.....	2,438	16,505	98	34,035,184	138	92,900,749	126	58,865,565	108
Patent or proprietary medicines and compounds.....	1,522	16,434	99	94,760,833	75	318,906,928	45	224,137,085	32
Bolts, nuts, washers, and rivets, not made in plants operated in connection with rolling mills.....	117	16,175	100	44,211,785	113	102,392,000	122	58,180,314	109
Oil, cake, and meal, cottonseed.....	553	15,825	101	249,019,800	38	298,376,039	48	49,356,239	116
House-furnishing goods, not elsewhere classified.....	964	15,704	102	76,624,989	88	127,002,002	101	50,977,013	114
Fur goods.....	2,855	15,752	103	176,106,910	48	277,592,752	54	101,485,842	67
Cotton small wares.....	202	15,281	104	33,036,203	139	65,169,753	150	31,533,546	146
Cutlery (not including silver and plated cutlery) and edge tools.....	230	14,991	105	14,780,335	201	78,680,872	186	63,871,637	101
Aircraft and parts.....	132	14,710	106	27,308,103	157	71,152,924	144	48,784,821	123
Smelting and refining, copper.....	26	14,544	107	920,351,441	8	694,783,802	17	74,432,421	89
Cordage and twine.....	123	14,489	108	54,573,265	109	91,455,117	127	36,881,868	138
Phonographs.....	59	14,416	109	37,323,137	127	96,849,048	125	59,525,911	104
Soap.....	282	14,363	110	180,352,984	47	310,191,530	46	129,838,546	50
Sugar refining, cane.....	21	13,912	111	438,309,151	22	507,389,262	34	88,990,111	95
Corsets and allied garments.....	213	13,664	112	36,035,079	130	76,802,199	138	40,767,120	132
Canning and preserving: Fish, crabs, shrimps, oysters, and clams.....	348	13,612	113	53,230,911	110	80,848,513	134	27,608,602	168
Perfumes, cosmetics, and other toilet preparations.....	815	13,109	114	68,295,879	104	193,440,550	73	135,141,671	51
Wood preserving.....	109	13,077	115	147,702,724	55	190,944,045	75	43,241,921	124
Caskets, coffins, burial cases, and other morticians' goods.....	414	13,033	116	39,350,294	123	88,281,872	129	45,931,578	117
Photographic apparatus and materials.....	115	12,967	117	30,392,531	149	102,827,386	119	79,434,855	93
Photo-engraving, not done in printing establishments.....	654	12,353	118	11,003,121	222	77,382,259	137	66,379,138	100
Bags, other than paper, not made in textile mills.....	202	11,828	119	144,275,477	56	170,175,893	83	26,900,416	163
Smelting and refining, zinc.....	30	11,618	120	74,760,082	90	118,901,070	109	44,140,082	122
Wrought pipe, welded and heavy riveted, not made in plants operated in connection with rolling mills.....	50	11,417	121	70,120,041	97	124,658,966	108	54,538,025	112
Trunks, suitcases, and bags.....	467	11,359	122	31,693,935	146	63,988,929	153	32,274,094	144
Stationery goods, not elsewhere classified.....	203	11,078	123	32,177,887	142	74,082,047	140	41,884,169	128
Locomotives, not made in railroad repair shops.....	16	11,046	124	52,803,092	111	83,858,258	132	31,050,166	149
Tobacco: Chewing and smoking, and snuff.....	152	10,811	125	72,404,329	93	170,332,951	78	106,838,622	64
Sporting and athletic goods, not including firearms or ammunition.....	242	10,703	126	24,482,236	168	58,288,728	160	33,806,492	142
Motion pictures, not including projection in theaters.....	142	10,784	127	38,441,025	126	184,102,410	76	145,081,394	48
Watches and watch movements.....	8	10,738	128	10,455,921	231	34,370,399	202	23,914,478	189
Plated ware.....	96	10,728	129	16,750,985	192	55,429,950	163	38,078,074	134
Cooperage.....	590	10,691	130	41,515,500	116	64,841,788	151	28,326,288	176
Druggists' preparations.....	429	10,688	131	43,775,986	114	124,778,487	102	81,002,501	84
Food preparations, not elsewhere classified.....	862	10,616	132	96,387,089	73	171,880,987	82	76,473,348	87
Sewing machines and attachments.....	39	10,467	133	16,458,425	193	45,094,600	180	28,636,175	156
Pocketbooks, purses, and cardcases.....	290	10,430	134	35,351,605	133	63,027,515	148	33,275,910	143
Clocks, clock movements, time-recording devices, and time stamps.....	56	10,401	135	10,875,113	227	42,185,875	185	31,490,762	146
Boat and shoe findings, not made in boat and shoe factories.....	382	10,376	136	31,964,401	144	58,625,445	159	26,661,044	160
Envelopes.....	171	10,367	137	29,927,983	152	61,286,992	156	31,359,809	148
Feeds, prepared, for animals and fowls.....	750	10,223	138	327,919,743	34	402,752,534	41	74,832,701	88
Engraving, steel and copperplate, and plate printing.....	466	10,130	139	11,864,764	217	47,161,641	171	35,206,877	140
All other industries (reporting less than 10,000 wage earners), total.....	27,172	657,157	-----	3,894,196,056	-----	6,655,289,782	-----	2,761,093,726	-----

GENERAL SUMMARY

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TABLE 7.—ESTIMATED NET VALUE OF MANUFACTURED PRODUCTS, BY INDUSTRY GROUPS: 1929

[While the net-value figure in the final column for "All groups" represents the value of all the finished products of industry, the 16 items for the individual industry groups which together make up the total net value of products do not represent exactly the values of completely-manufactured products for the respective groups. For example: To arrive at the value of "Food and kindred products" ready for ultimate consumption it would be necessary to add to the \$9,682,000,000 items an estimated cost of containers obtained from other industry groups. On the other hand, for the "Rubber products" group it would be necessary to deduct from the gross-value figure the estimated value of rubber semimanufactures, such as tires sold for initial installation on motor vehicles. For method of computing net value, see GENERAL EXPLANATIONS—Duplication in Cost of Materials and Value of Products, p. 6]

INDUSTRY GROUP	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY				VALUE OF PRODUCTS	
	Total	Fuel and purchased energy		Raw materials and imported semimanufactures	Domestic semimanufactures	Gross
		Coal, natural gas, and purchased energy	Manufactured fuels			Net
All groups	(1) \$38,549,579,732	(2) \$1,298,319,387	(3) \$567,846,352	(4) \$14,531,000,000	(5) \$22,152,000,000	(6) \$70,434,863,443
Food and kindred products	8,632,282,857	134,218,841	27,224,052	6,156,000,000	2,815,000,000	12,023,589,289
Textiles and their products	5,103,845,724	109,173,983	11,030,830	1,907,000,000	3,075,000,000	0,243,302,523
Forest products	1,586,182,953	31,210,400	4,591,249	295,000,000	1,255,000,000	3,591,765,090
Paper and allied products	1,092,722,103	75,131,224	6,564,567	319,000,000	692,000,000	1,892,251,148
Printing, publishing, and allied industries	766,483,548	22,147,106	3,588,053	157,000,000	584,000,000	3,170,139,051
Chemicals and allied products	1,970,713,269	84,474,602	14,962,658	821,000,000	1,050,000,000	3,759,404,640
Products of petroleum and coal	2,546,840,193	204,764,176	108,461,352	1,895,000,000	248,000,000	3,647,747,957
Rubber products	578,677,081	19,067,788	609,587	211,000,000	348,000,000	1,117,460,252
Leather and its manufactures	1,131,041,983	13,181,407	506,494	343,000,000	775,000,000	1,905,976,775
Stone, clay, and glass products	526,839,979	138,813,844	18,710,826	219,000,000	150,000,000	1,561,414,590
Iron and steel and their products, not including machinery	3,802,873,480	166,904,501	296,133,340	700,000,000	2,640,000,000	7,137,028,058
Nonferrous metals and their products	2,405,444,198	43,503,460	21,281,525	825,000,000	1,576,000,000	3,607,057,717
Machinery, not including transportation equipment	2,694,370,020	78,113,499	32,188,361	54,000,000	2,530,000,000	7,043,380,300
Transportation equipment, air, land, and water	3,633,148,078	41,153,215	12,803,903	4,000,000	3,625,000,000	6,047,200,390
Railroad repair shops	548,345,661	20,678,928	4,504,808	517,000,000	1,269,916,689	748,000,000
Miscellaneous industries	1,389,300,501	10,083,538	3,092,841	504,000,000	772,000,000	3,426,319,134

¹ Amount deducted, \$302,059,330, representing cost of contract work.

² Contains \$38,263,203, which represents the cost of crude oil used as fuel.

² Amount deducted, \$169,898,605, representing cost of contract work.

TABLE 8.—SUMMARY BY GROUPS OF INDUSTRIES: 1914 TO 1929

[Includes, for 1919 and 1914, data for establishments reporting products valued at less than \$5,000. See GENERAL EXPLANATIONS—Establishments Covered—Size. The totals for all groups and the figures for Group 1 for years prior to 1927 as given in this summary differ from those published in the report for 1927 because of the inclusion in this table, but not in the corresponding table in the report for 1927, of data for the "Poultry killing and dressing" industry for 1925 and earlier years. The figures for 1927, and in most cases those for earlier years, for Groups 1, 3, 4, 5, 11, 12, 13, and 14 differ from those published in the 1927 report. The reasons for these differences are given in the introductory text for the respective groups, Chapter VIII. See GENERAL EXPLANATIONS—Changes in Groups, Industry Titles, and Classifications, p. 9.]

GROUP	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products	Value added by manufacture ¹	Horsepower
All groups, total	1929	210,059	8,838,743	\$11,620,973,254	\$38,549,579,732	\$70,434,863,443	\$31,885,283,711	42,031,061
	1927	101,866	8,349,755	10,848,802,532	35,133,136,889	62,718,347,289	27,585,210,400	35,825,051
	1925	187,390	8,384,201	10,729,068,927	35,935,477,704	62,713,713,730	26,778,068,026	35,772,628
	1923	196,300	8,778,150	11,009,207,720	34,705,697,749	60,555,998,200	25,850,300,451	33,094,228
	1921	196,267	6,946,570	8,202,324,839	25,321,085,340	43,653,282,833	18,332,227,487	(2)
	1919	274,508	9,041,311	10,461,790,869	37,285,731,430	62,193,426,014	24,904,605,184	20,327,669
	1914	272,518	7,023,085	4,067,718,740	14,358,935,014	24,216,514,573	9,857,575,559	22,200,899
1. Food and kindred products	1929	56,320	753,247	902,142,970	8,632,282,857	12,023,589,289	3,391,306,482	4,007,913
	1927	40,757	670,520	823,387,583	8,113,432,553	11,015,680,010	2,902,427,427	4,134,973
	1925	48,113	604,700	703,680,786	7,748,077,877	10,418,536,301	2,069,855,424	3,881,952
	1923	51,847	682,137	795,571,072	6,900,846,444	9,524,050,769	2,533,204,315	3,728,025
	1921	52,113	626,618	746,260,284	8,122,032,791	8,207,129,504	2,144,196,773	(2)
	1919	60,423	733,664	774,723,835	10,262,930,856	12,748,348,465	2,495,717,609	3,203,106
	1914	67,403	536,436	303,341,626	8,007,180,447	4,977,700,017	1,070,574,470	2,508,932
2. Textiles and their products	1929	27,404	1,707,798	1,733,031,423	5,103,845,724	9,243,302,523	4,130,456,799	4,145,998
	1927	26,843	1,694,416	1,750,658,130	4,922,715,868	8,950,472,873	4,027,757,005	4,173,438
	1925	24,450	1,628,233	1,654,814,270	5,349,924,770	9,120,154,902	3,776,230,182	3,986,522
	1923	26,763	1,715,203	1,743,797,717	5,394,441,315	9,462,281,966	4,067,840,651	3,783,401
	1921	25,956	1,509,738	1,472,352,098	5,301,090,387	6,956,404,903	3,155,374,576	(2)
	1919	28,451	1,610,003	1,481,142,946	5,379,387,636	9,210,032,857	3,831,545,321	3,248,304
	1914	23,350	1,505,912	975,781,743	2,013,737,838	3,444,810,423	1,431,072,685	2,717,078
3. Forest products	1929	26,912	870,883	939,382,973	1,586,182,953	3,591,705,090	2,006,582,137	3,674,204
	1927	20,169	864,508	931,020,537	1,636,647,040	3,462,925,167	1,826,278,127	3,382,457
	1925	21,924	921,266	978,472,291	1,725,350,920	3,689,120,705	1,063,775,785	3,472,970
	1923	21,678	931,816	902,594,530	1,606,395,023	3,633,885,573	1,966,990,550	3,330,236
	1921	21,398	703,860	670,461,643	1,197,427,939	2,456,857,048	1,249,229,104	(2)
	1919	41,201	864,001	859,572,003	1,308,341,322	3,113,480,428	1,745,110,104	3,409,746
	1914	43,466	865,294	446,897,411	765,935,795	1,616,462,752	880,510,057	3,176,436
4. Paper and allied products	1929	8,126	233,393	287,330,792	1,092,722,103	1,892,251,148	709,520,045	3,166,804
	1927	2,972	224,437	272,153,670	1,082,303,311	1,783,097,079	703,634,368	2,813,694
	1925	2,727	221,502	203,097,360	919,057,498	1,546,814,124	627,156,626	2,574,707
	1923	2,685	219,026	250,144,000	878,763,995	1,456,970,076	578,206,081	2,313,562
	1921	2,600	184,766	202,702,800	669,070,172	1,071,800,316	402,730,144	(2)
	1919	2,677	208,115	212,724,291	720,908,211	1,250,445,203	529,536,902	1,967,446
	1914	2,452	166,762	88,844,233	314,832,826	519,089,071	204,850,845	1,007,268
5. Printing, publishing, and allied industries	1929	27,522	357,998	630,871,372	706,483,548	3,170,139,651	2,403,656,103	640,441
	1927	25,433	328,603	586,183,201	755,037,668	2,850,860,389	2,104,822,721	569,528
	1925	23,826	315,264	542,418,876	604,576,980	2,596,870,775	1,902,293,795	486,087
	1923	23,114	307,903	492,005,953	665,654,236	2,315,318,106	1,640,663,870	429,967
	1921	22,777	282,500	434,727,504	663,300,138	2,078,783,889	1,415,463,701	(2)
	1919	33,747	301,934	351,997,797	587,293,851	1,764,386,908	1,177,093,058	379,236
	1914	34,767	286,264	207,720,982	266,435,038	937,125,476	670,690,438	341,805

See footnotes at end of table

CENSUS OF MANUFACTURES: 1929

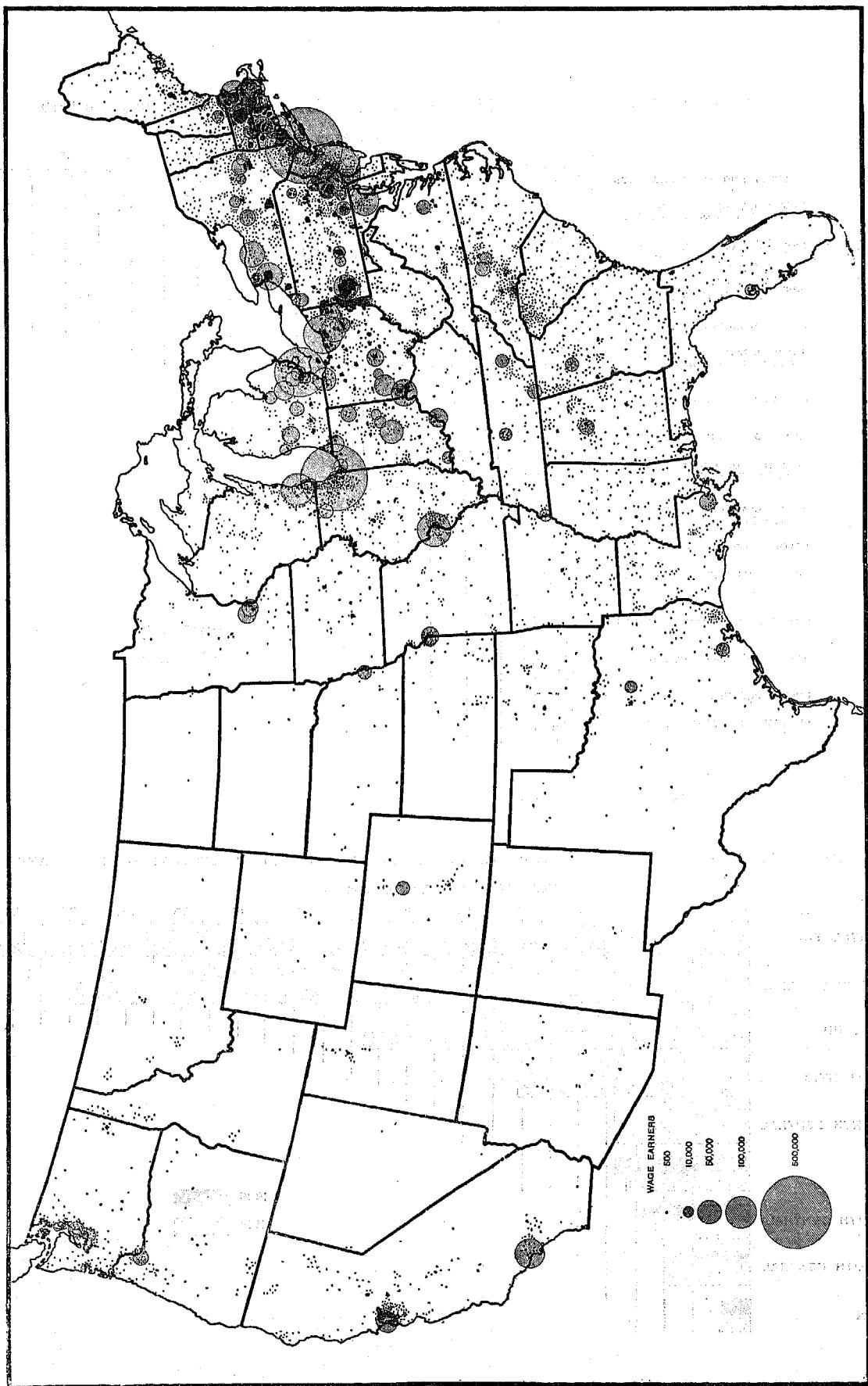
TABLE 8.—SUMMARY BY GROUPS OF INDUSTRIES: 1914 TO 1929—Continued

[See note at head of this table]

GROUP	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products	Value added by manufacture ¹	Horsepower
6. Chemicals and allied products ² -----	1929	8,278	280,868	\$854,393,308	\$1,970,713,209	\$8,750,404,840	\$1,788,691,371	2,312,295
	1927	7,541	253,436	317,908,003	1,803,084,544	3,351,892,059	1,548,807,515	1,848,308
	1925	7,282	244,812	296,526,641	1,830,501,808	3,211,230,498	1,380,638,000	1,748,481
	1923	7,197	246,527	288,833,720	1,702,944,290	2,933,561,637	1,230,617,347	1,054,228
	1921	7,348	199,596	224,332,535	1,352,904,081	2,225,917,456	873,018,375	(*)
	1919	10,732	320,053	364,884,045	2,280,338,413	3,802,752,737	1,534,414,324	1,720,521
	1914	11,461	258,413	104,420,708	1,011,126,288	1,964,030,408	953,505,118	1,458,062
7. Products of petroleum and coal-----	1929	1,497	147,216	220,050,010	2,546,840,193	3,647,747,957	1,100,007,764	1,755,258
	1927	1,418	141,055	217,485,282	2,262,608,564	3,060,225,690	797,527,145	1,513,181
	1925	1,582	136,366	210,033,811	2,360,683,404	3,230,008,511	873,425,107	1,241,877
	1923	1,650	138,330	212,881,574	1,981,370,216	2,778,888,167	797,517,951	1,092,914
	1921	1,560	115,006	180,452,175	1,760,804,612	2,372,039,178	611,234,506	(*)
	1919	1,684	131,759	185,509,027	1,035,919,806	2,280,170,161	653,250,355	709,507
	1914	1,782	90,882	60,881,700	474,558,358	721,056,198	247,097,840	484,659
8. Rubber products-----	1929	525	149,148	207,305,857	578,677,681	1,117,460,282	538,782,571	821,312
	1927	510	141,997	108,737,743	660,370,209	1,225,077,114	564,700,905	790,022
	1925	530	141,869	101,285,520	721,729,675	1,260,805,063	539,075,388	659,691
	1923	529	137,888	182,034,056	501,162,768	658,517,634	457,354,868	605,834
	1921	496	103,273	123,612,873	377,879,372	704,003,133	327,023,761	(*)
	1919	477	158,549	193,763,080	594,343,560	1,138,216,019	643,872,429	429,273
	1914	342	74,022	44,107,402	163,034,713	300,993,798	137,958,083	109,242
9. Leather and its manufactures-----	1929	4,277	318,415	350,412,972	1,181,941,903	1,905,076,775	774,034,812	486,342
	1927	4,205	315,091	364,447,390	1,088,640,717	1,869,305,048	780,604,331	419,591
	1925	4,243	314,025	355,340,411	1,012,880,605	1,763,709,361	750,828,756	413,173
	1923	4,808	344,545	388,630,008	1,083,345,380	1,880,085,716	798,740,336	412,098
	1921	4,813	280,071	314,411,672	634,397,705	1,544,185,251	609,787,548	(*)
	1919	6,307	349,302	363,453,419	1,713,807,336	2,010,230,727	890,423,391	382,537
	1914	6,758	307,060	168,357,560	753,135,354	1,104,584,557	351,450,203	811,104
10. Stone, clay, and glass products-----	1929	8,514	328,417	432,817,803	526,339,979	1,561,414,590	1,085,074,611	2,854,402
	1927	8,673	350,017	464,272,991	594,747,314	1,612,548,785	1,017,774,451	2,709,181
	1925	8,478	363,036	407,012,423	603,426,010	1,640,651,985	1,037,225,075	2,848,157
	1923	8,317	351,692	453,567,361	573,472,386	1,563,120,627	899,048,241	1,936,054
	1921	8,347	252,990	307,004,590	428,258,601	1,033,091,070	604,832,409	(*)
	1919	12,509	302,810	332,725,753	422,611,208	1,111,746,070	689,134,802	1,684,917
	1914	14,790	335,824	206,084,755	240,818,101	618,699,787	377,881,686	1,493,976
11. Iron and steel and their products, not including machinery-----	1929	6,640	880,882	1,380,986,821	3,802,873,486	7,137,928,058	3,275,054,572	9,200,822
	1927	6,340	834,907	1,263,812,344	3,644,615,067	6,197,504,589	2,652,970,522	8,322,730
	1925	6,063	850,733	1,283,840,706	3,734,084,771	6,400,222,488	2,720,137,717	7,518,726
	1923	6,363	892,185	1,324,172,787	4,182,741,176	6,827,670,388	2,674,029,209	7,259,009
	1921	6,251	571,428	730,875,339	2,140,171,468	3,455,541,015	1,815,369,557	(*)
	1919	7,017	857,764	1,243,726,202	3,423,280,005	5,587,843,671	2,464,563,606	6,420,697
	1914	6,320	617,776	421,746,126	1,315,690,489	2,137,113,329	821,422,840	4,587,572
12. Nonferrous metals and their products-----	1929	7,522	314,741	443,466,623	2,405,444,198	3,597,057,717	1,131,613,519	1,570,217
	1927	6,761	272,067	383,184,596	1,783,213,469	2,677,107,246	803,893,777	1,226,411
	1925	7,006	276,616	382,652,356	1,048,438,054	2,839,550,465	891,112,411	1,182,140
	1923	7,501	297,708	395,078,970	1,767,637,612	2,637,169,840	869,522,228	1,171,192
	1921	7,858	212,630	266,892,785	886,264,843	1,408,059,444	521,794,601	(*)
	1919	10,441	304,768	319,171,419	1,737,233,945	2,510,031,512	781,797,567	953,109
	1914	9,808	239,542	184,570,750	904,555,946	1,329,834,086	365,278,141	550,903
13. Machinery, not including transportation equipment-----	1929	12,955	1,001,269	1,634,165,729	2,694,379,620	7,043,330,300	4,349,000,761	3,047,343
	1927	11,982	883,508	1,284,132,534	2,053,041,924	5,345,723,728	2,294,781,804	2,995,286
	1925	11,807	858,843	1,236,359,140	1,985,307,067	5,020,281,100	3,084,014,033	2,714,377
	1923	12,147	907,707	1,265,742,642	1,801,524,166	4,727,818,290	2,836,294,124	2,900,443
	1921	12,395	602,277	832,782,828	1,361,163,280	3,235,074,006	1,873,911,026	(*)
	1919	14,821	698,484	1,240,486,944	1,973,457,522	4,768,073,305	2,795,215,873	2,060,825
	1914	13,467	618,737	412,400,274	602,066,570	1,582,408,404	919,441,834	1,256,908
14. Transportation equipment, air, land, and water-----	1929	2,550	533,355	943,221,005	3,683,148,078	6,047,209,390	2,364,081,312	2,271,192
	1927	2,537	494,005	803,297,856	2,907,949,399	4,698,971,606	1,786,022,207	2,027,686
	1925	2,778	559,578	908,487,503	3,389,101,383	5,451,753,433	2,062,652,050	1,888,901
	1923	3,873	608,328	903,399,377	3,394,504,710	5,333,479,375	1,938,974,066	1,624,408
	1921	4,273	405,773	591,333,775	1,803,011,413	3,018,154,321	1,215,142,908	(*)
	1919	6,768	863,582	1,259,014,020	3,200,602,252	5,627,262,990	2,426,680,738	1,458,804
	1914	7,818	812,502	230,614,798	639,793,313	1,137,422,034	497,629,621	602,450
15. Railroad repair shops-----	1929	2,297	398,150	627,311,434	548,343,565	1,260,916,830	721,573,274	1,153,147
	1927	2,300	428,672	648,908,452	545,491,764	1,289,695,158	744,208,404	1,110,821
	1925	2,363	457,755	568,191,708	563,045,944	1,332,079,079	760,038,135	942,248
	1923	2,345	523,430	722,958,122	631,358,483	1,520,002,751	888,734,268	*798,005
	1921	2,326	418,285	671,955,829	506,571,099	1,267,342,559	760,771,480	(*)
	1919	2,308	515,709	726,690,406	547,828,694	1,354,446,004	806,617,400	644,875
	1914	2,011	365,902	253,149,943	261,438,181	552,617,790	291,179,009	478,898
16. Miscellaneous industries-----	1929	14,620	417,497	500,681,672	1,359,360,506	3,426,819,184	2,066,058,628	664,871
	1927	14,320	440,450	529,676,055	1,378,160,468	3,317,080,159	1,938,929,691	837,080
	1925	14,216	439,503	508,749,895	1,351,009,948	3,125,318,940	1,773,708,992	732,559
	1923	15,439	475,481	528,385,828	1,429,535,549	3,003,697,298	1,574,061,749	701,511
	1921	16,702	418,221	442,100,510	1,315,607,395	2,557,958,775	1,242,351,380	(*)
	1919	25,195	516,754	511,812,383	1,461,746,515	2,995,478,628	1,633,732,111	751,116
	1914	26,537	442,317	227,722,928	608,691,216	1,270,703,669	607,012,453	449,512

¹ Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.² Not called for on schedule.³ The comparability of the figures for 1914 and 1919 with those for later years is affected by the decrease in the legal manufacture of alcoholic beverages resulting from the enactment of the national prohibition act.⁴ Revised; revision not carried into total for all groups.

FIGURE 1.—GEOGRAPHIC DISTRIBUTION OF WAGE EARNERS IN MANUFACTURING INDUSTRIES: 1929
[Circles indicate cities reporting 10,000 or more wage earners; dots indicate other areas]



CENSUS OF MANUFACTURES: 1929

FIGURE 2.—WAGE EARNERS IN MANUFACTURES, BY INDUSTRY GROUPS: 1929 AND 1919

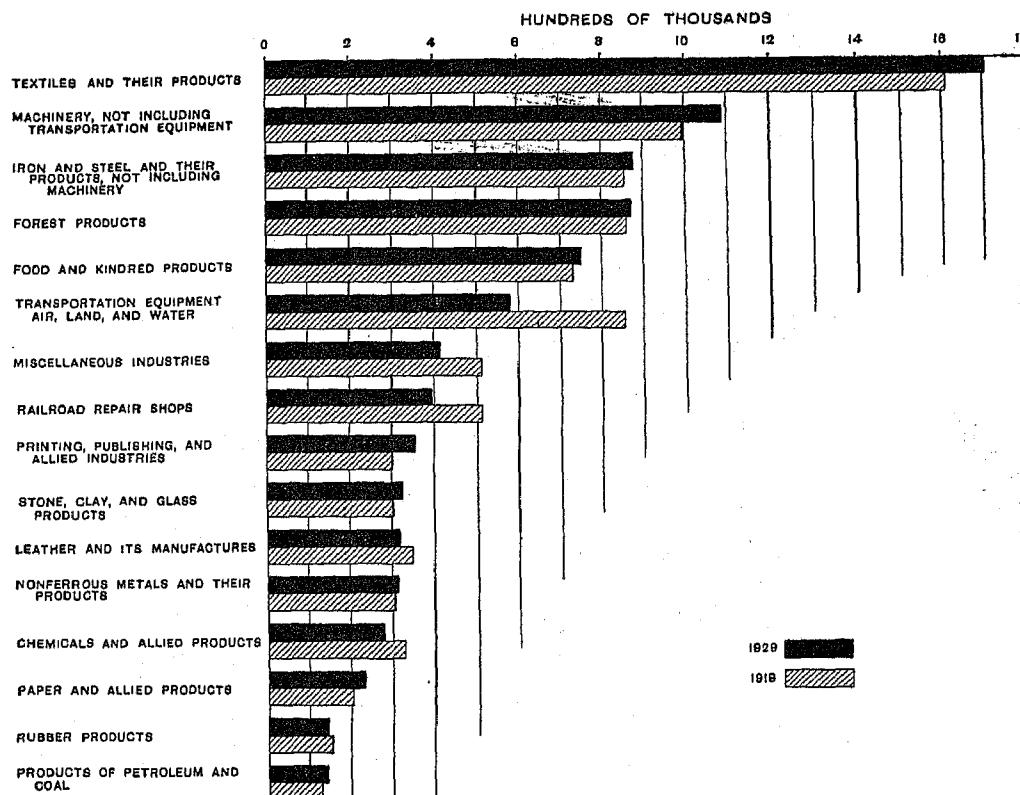


FIGURE 3.—WAGE EARNERS IN MANUFACTURING INDUSTRIES, BY GEOGRAPHIC DIVISIONS: 1929 AND 1919

